#3 Blair

Federal Emergency Management Agency

Washington, D.C. 20472

FEB 23 1998

98 MAR -9 AM 10:44

MAYOR'S OFFICE

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

IN REPLY REFER TO:
Case No.: 97-06-1175P

The Honorable Martin J. Chávez
Mayor, City of Albuquerque
P.O. Box 1293
Albuquerque, New Mexico 87103

Community: City of Albuquerque, New Mexico
Community No.: 350002
Map Panels Affected: 35001C0328D and 0329D

Dear Mayor Chávez:

116

In a Letter of Map Revision dated October 3, 1997, you were notified of proposed modified flood elevation determinations affecting the Flood Insurance Rate Map (FIRM) for the City of Albuquerque, Bernalillo County, New Mexico. These determinations were for the ponding area southwest of the intersection of Airport Drive and Bluewater Road, the ponding area northwest of the intersection of Airport Drive and Bluewater Road and the ponding area north of Bluewater Road between Albuquerque City limits and Airport Drive. The 90-day appeal period that was initiated on November 11, 1997, when the Federal Emergency Management Agency (FEMA) published a notice of proposed base flood elevations (BFEs) in the *Albuquerque Journal*, has elapsed.

FEMA received no valid requests for changes to the modified BFEs. Therefore, the modified BFEs that became effective on October 3, 1997, remain valid and revise the FIRM that was in effect prior to that date.

The modifications are pursuant to Section 206 of the Flood Disaster Protection Act of 1973 (Public Law 93-234) and are in accordance with the National Flood Insurance Act of 1968, as amended (Title XIII of the Housing and Urban Development Act of 1968, Public Law 90-448), 42 U.S.C. 4001-4128, and 44 CFR Part 65. The community number(s) and suffix code(s) are unaffected by this revision. The community number and appropriate suffix code as shown above will be used by the National Flood Insurance Program (NFIP) for all flood insurance policies and renewals issued for your community.

FEMA has developed criteria for floodplain management as required under the above-mentioned Acts of 1968 and 1973. To continue participation in the NFIP, your community must use the modified BFEs to carry out the floodplain management regulations for the NFIP. The modified BFEs will also be used to calculate the appropriate flood insurance premium rates for all new buildings and their contents and for the second layer of insurance on existing buildings and their contents.

If you have any questions regarding the necessary floodplain management measures for your community or the NFIP in general, we urge you to contact the Director, Mitigation Division of FEMA in Denton, Texas, at (817) 898-5127. If you have any questions concerning the proposed modified BFEs or mapping issues in general, please contact Mr. Alan Johnson of our staff in Washington, DC, either by telephone at (202) 646-3403 or by facsimile at (202) 646-4596.

Sincerely,

Matthew B. Miller

Matthew B. Miller, P.E., Chief
Hazards Study Branch
Mitigation Directorate

#33.5

Federal Emergency Management Agency

Washington, D.C. 20472

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

IN REPLY REFER TO:
Case No.: 97-06-1175P

The Honorable Tom Rutherford
Chairman, Bernalillo County
Board of Commissioners
2400 Broadway Southeast
Albuquerque, New Mexico 87102

Community: Bernalillo County, New Mexico
Community No.: 350001
Panel Affected: 35001C0328 D
Effective Date of This Revision: OCT 03 1997

102-I-C

Dear Mr. Rutherford:

This responds to a request that the Federal Emergency Management Agency (FEMA) revise the effective Flood Insurance Rate Map (FIRM) for Bernalillo County, New Mexico and Incorporated Areas (the effective FIRM for your community), in accordance with Part 65 of the National Flood Insurance Program (NFIP) regulations. In a letter dated August 21, 1997, Ms. Susan M. Calongne, P.E., City Floodplain Administrator, City of Albuquerque, requested that FEMA revise the FIRM to show the effects that the following projects along Mirehaven Arroyos B and C would have on the effective FIRM: construction of a series of six retention ponds and an associated storm drain system (Unser Diversion) that conveys flow to the existing Unser Boulevard storm drain, a series of terraced berms, and a storm drain system along Airport Drive and Bluewater Road and curb reconstruction along Bluewater Road. These projects are associated with the development of Atrisco Business Park. This request follows up on a Conditional Letter of Map Revision issued on April 21, 1994.

All data required to complete our review of this request were submitted with letters from Ms. Calongne.

We have completed our review of the submitted data and the flood data shown on the effective FIRM. As a result of the project, the flood having a 1-percent chance of being equaled or exceeded in any given year (base flood) is contained within the six retention ponds and storm drain system. The Special Flood Hazard Area (SFHA), the area that would be inundated by the base flood, located south of Interstate Highway 40, west of Airport Drive, north of Avalon Road, and east of the Unser Diversion, has been removed from the FIRM. The modifications are shown on the enclosed annotated copy of FIRM Panel 35001C0328 D. This Letter of Map Revision (LOMR) hereby revises the above-referenced panel of the effective FIRM dated September 20, 1996.

Because this revision request also affects the City of Albuquerque, a separate LOMR for that community was issued on the same date as this LOMR.

The modifications are effective as of the date shown above. The map panel(s) as listed above and as modified by this letter will be used for all flood insurance policies and renewals issued for your community.

A review of the determination made by this LOMR and any requests to alter this determination should be made within 30 days. Any request to alter the determination must be based on scientific or technical data.

We will not physically revise and republish the FIRM and Flood Insurance Study (FIS) report for your community to reflect the modifications made by this LOMR at this time. When changes to the previously cited FIRM panel(s) and FIS report warrant physical revision and republication in the future, we will incorporate the modifications made by this LOMR at that time.

This LOMR is based on minimum floodplain management criteria established under the NFIP. Your community is responsible for approving all floodplain development, and for ensuring all necessary permits required by Federal or State law have been received. State, county, and community officials, based on knowledge of local conditions and in the interest of safety, may set higher standards for construction in the SFHA. If the State, county, or community has adopted more restrictive or comprehensive floodplain management criteria, these criteria take precedence over the minimum NFIP criteria.

The basis of this LOMR is, in whole or in part, a storm drain system project. NFIP regulations, as cited in Paragraph 60.3(b)(7), require that communities ensure that the flood-carrying capacity within the altered or relocated portion of any watercourse is maintained. This provision is incorporated into your community's existing floodplain management regulations. Consequently, the ultimate responsibility for maintenance of the storm drain system rests with your community.

Because this LOMR will not be printed and distributed to primary users, such as local insurance agents and mortgage lenders, your community will serve as a repository for these new data. We encourage you to disseminate the information reflected by this LOMR throughout the community, so that interested persons, such as property owners, local insurance agents, and mortgage lenders, may benefit from the information. We also encourage you to prepare a related article for publication in your community's local newspaper. This article should describe the changes that have been made and the assistance that officials of your community will give to interested persons by providing these data and interpreting the NFIP maps.

This determination has been made pursuant to Section 206 of the Flood Disaster Protection Act of 1973 (Public Law 93-234) and is in accordance with the National Flood Insurance Act of 1968, as amended (Title XIII of the Housing and Urban Development Act of 1968, Public Law 90-448), 42 U.S.C. 4001-4128, and 44 CFR Part 65. Pursuant to Section 1361 of the National Flood Insurance Act of 1968, as amended, communities participating in the NFIP are required to adopt and enforce floodplain management regulations that meet or exceed minimum NFIP criteria. These criteria are the minimum and do not supersede any State or local requirements of a more stringent nature. This includes adoption of the effective FIRM to which the regulations apply and the modifications made by this LOMR. Our records show that your community has met this requirement.

A Consultation Coordination Officer (CCO) has been designated to assist your community. The CCO will be the primary liaison between your community and FEMA. For information regarding your CCO, please contact:

Mr. James LeGrotte
Director, Mitigation Division
Federal Emergency Management Agency, Region VI
Federal Regional Center, Room 206
800 North Loop 288
Denton, Texas 76201-3698
(817) 898-5127

If you have any questions regarding floodplain management regulations for your community or the NFIP in general, please contact the CCO for your community at the telephone number cited above. If you have any technical questions regarding this LOMR, please contact Mr. Karl Mohr of our staff in Washington, DC, either by telephone at (202) 646-2770 or by facsimile at (202) 646-4596.

Sincerely,

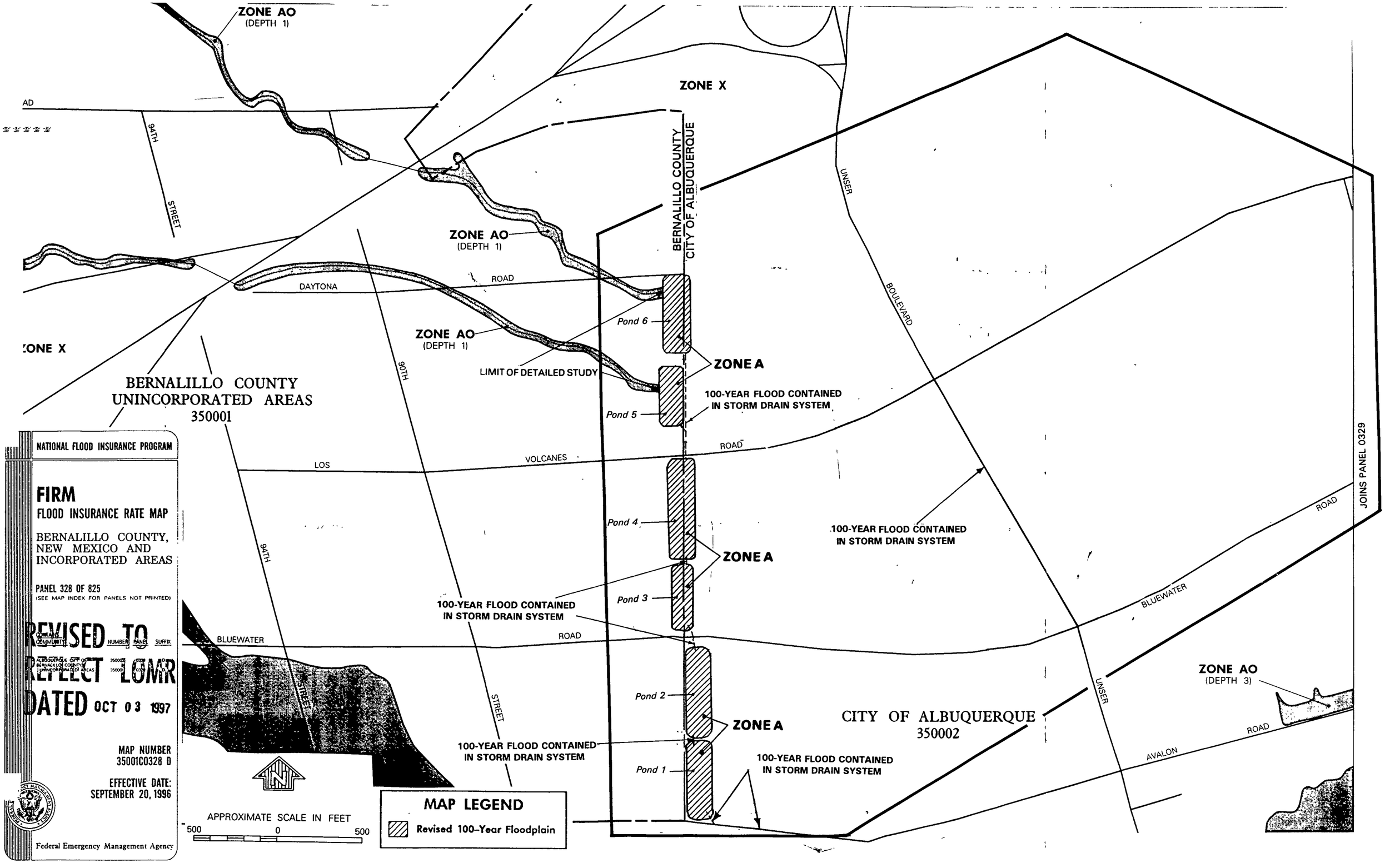
for Frederick H. Sharrocks, Jr., Chief
Hazard Identification Branch
Mitigation Directorate

Enclosure(s)

cc: The Honorable Martin J. Chávez
Mayor, City of Albuquerque

Ms. Susan M. Calongne, P.E.
City/County Floodplain Administrator
City of Albuquerque

Ms. Laurie B. Schuller
Easterling & Associates, Inc.


ZONE AO
(DEPTH 1)
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AD
94TH
STREET
BERNALILLO COUNTY
CITY OF ALBUQUERQUE
UNSER
BOULEVARD
ZONE AO
(DEPTH 1)
DAYTONA
ROAD
Pond 6
ZONE AO
(DEPTH 1)
ZONE A
LIMIT OF DETAILED STUDY
90TH
ZONE X
BERNALILLO COUNTY
UNINCORPORATED AREAS
350001
100-YEAR FLOOD CONTAINED
IN STORM DRAIN SYSTEM
Pond 5
ROAD
LOS
VOLCANES
Pond 4
100-YEAR FLOOD CONTAINED
IN STORM DRAIN SYSTEM
ZONE A
ROAD
JOINS PANEL 0329
Pond 3
100-YEAR FLOOD CONTAINED
IN STORM DRAIN SYSTEM
BLUEWATER
ROAD
BLUEWATER
94TH
STREET
STREET
Pond 2
ZONE A
CITY OF ALBUQUERQUE
350002
UNSER
ZONE AO
(DEPTH 3)
ROAD
100-YEAR FLOOD CONTAINED
IN STORM DRAIN SYSTEM
Pond 1
100-YEAR FLOOD CONTAINED
IN STORM DRAIN SYSTEM
AVALON
APPROXIMATE SCALE IN FEET
500
0
500
MAP LEGEND
Revised 100-Year Floodplain
NATIONAL FLOOD INSURANCE PROGRAM
FIRM
FLOOD INSURANCE RATE MAP
BERNALILLO COUNTY,
NEW MEXICO AND
INCORPORATED AREAS
PANEL 328 OF 825
(SEE MAP INDEX FOR PANELS NOT PRINTED)
COMMUNITY NUMBER PANEL SUFFIX
ALBUQUERQUE, CITY OF 350002 D
BERNALILLO COUNTY UNINCORPORATED AREAS 350001 N 0328 D
REVISED TO
REFLECT LOMR
DATED OCT 03 1997
MAP NUMBER
35001C0328 D
EFFECTIVE DATE:
SEPTEMBER 20, 1996
Federal Emergency Management Agency

#33.5

Federal Emergency Management Agency

Washington, D.C. 20472

September 3, 1997

Ms. Susan M. Calongne, P.E.
City/County Floodplain Administrator
City of Albuquerque and Bernalillo County
P.O. Box 1293
Albuquerque, New Mexico 87103

IN REPLY REFER TO:
Case No.: 97-06-1175P
Communities: City of Albuquerque and Bernalillo County, New Mexico
Community Nos.: 350002 and 350001

316-ACK.FRQ

Dear Ms. Calongne:

This responds to your request dated August 21, 1997, that the Federal Emergency Management Agency (FEMA) issue a revision to the Flood Insurance Rate Map (FIRM) for Bernalillo County, New Mexico and Incorporated Areas. Pertinent information about the request is listed below.

Identifier:	Unser Diversion/Atrisco Business Park
Flooding Sources:	Mirehaven Arroyos B and C
FIRM Panel(s) Affected:	35001C0328 D and 0329 D

We have completed an inventory of the items that you submitted. We have received the data and the review and processing fee ($2,300) required to begin a detailed technical review of your request. If additional data are required, we will inform you within 30 days of the date of this letter.

Please direct all questions concerning your request to our Technical Evaluation Contractor at the following address:

Michael Baker Jr., Inc.
3601 Eisenhower Avenue, Suite 600
Alexandria, Virginia 22304

Attention: Mr. Monther S. Madanat
(703) 317-6250

When you write us about your request, you must include the case number referenced above in your letter.

If you have any questions concerning FEMA policy, or the National Flood Insurance Program in general, please contact Mr. Karl Mohr of our staff in Washington, DC, either by telephone at (202) 646-2770 or by facsimile at (202) 646-4596.

Sincerely,

Frederick H. Sharrocks, Jr., Chief
Hazard Identification Branch
Mitigation Directorate

cc: Mr. Larry A. Blair, P.E.
Executive Engineer
Albuquerque Metropolitan Arroyo
Flood Control Authority

Ms. Laurie B. Schuller
Project Engineer
Easterling & Associates, Inc.

CITY OF
Albuquerque
Public Works Department

August 21, 1997

Martin J. Chávez, Mayor

Robert E. Gurulé, Director

Mr. Monther S. Madanat
Michael Baker Jr., Inc.
3601 Eisenhower Avenue, Suite 600
Alexandria, Virginia 22304-6439

RE: Request for A Letter of Map Revision for The Unser Diversion Project, City of Albuquerque, New Mexico, Community No. 350002, FIRM Panels 0328 and 0329, Former FEMA Case Number 94-06-127R.

Dear Mr. Madanat:

The purpose of this letter is to request a Letter of Map Revision for the above referenced project. This request consists of the elimination of the floodplain east of Unser Boulevard due to the construction of detention ponds and storm drain systems. This request follows the Conditional Letter of Map Revision from FEMA dated April 21, 1994.

Enclosed with this letter are the Application and Certification forms for requesting revisions to the National Flood Insurance Program (NFIP) maps. Along with the forms are the As-Built drawings and other NFIP-related information which should facilitate an efficient review. These have been enclosed along with the initial review fee of $2300.00.

The City of Albuquerque has reviewed and approved the drainage improvements submitted in this report. Our Community would greatly appreciate your prompt response and approval for this Letter of Map Revision. If you should have any questions concerning this submittal, please call me at (505) 924-3982.

Sincerely,

Susan Calongne

Susan M. Calongne, P.E.
City/County Floodplain Administrator

Attachments

c: Larry Blair, P.E., Albuquerque Metropolitan Arroyo Flood Control Authority (Letter only)
Charles M. Easterling, P.E., Easterling and Associates (Letter only)
Laurie B. Schuller, Easterling and Associates (Letter only)
File

MICHAEL MURPHY, CHAIR
TIM EICHENBERG, VICE-CHAIR
LINDA OLMSTED, SECRETARY-TREASURER
RONALD D BROWN, ASST SECRETARY-TREASURER
DANIEL W COOK, DIRECTOR

LARRY A BLAIR
EXECUTIVE ENGINEER

Albuquerque
Metropolitan
Arroyo
Flood
Control
Authority

2600 PROSPECT N E - ALBUQUERQUE N M 87107
TELEPHONE (505) 884-2215

August 12, 1997

Ms. Susan Calongne
City/County Floodplain Administrator
600 2nd Street N.W.
Albuquerque, New Mexico 87103

Hand Delivered

Re: LOMR Submittal, Unser Diversion Channel

Dear Susan:

Transmitted herewith is a cashier check (#380031), drawn on Sunwest Bank, dated 8/5/97, in the amount of $2,300.00 for the FEMA review fee for the subject LOMR submittal.

The signed LOMR submittal was sent to you via Easterling & Associates on August 6, 1997.

Please call if you have any questions.

Sincerely,
AMAFCA

John P. Kelly
Field Engineer

cc Dale W. Ek

Easterling & Associates, Inc.

2600 The American Rd. S.E., Suite 100
Rio Rancho, New Mexico 87124
(505)898-8021
FAX (505) 898-8501

August 6, 1997

Ms. Susan Calongne, P.E.
Floodplain Administrator
Hydrology Public Works Dept.
City of Albuquerque
P.O. Box 1299
Albuquerque, NM 87103

RE: Unser Diversion Channel LOMR

Dear Susan,

Transmitted herewith are two copies of the LOMR submittal for the Unser Diversion Channel. Both copies have been signed by Larry Blair. The package is ready for mailing to FEMA after you have completed your review and signed sheet 4 of Form 1. We would appreciate a copy of this signed sheet for our records. John Kelly will have Bell/Sunwest cut the $2300.00 check for FEMA's review fee and will hand deliver it to you.

Please note that the submittal is essentially a repeat of the original CLOMR which was accepted by FEMA in April 1994. As-builts have been provided and show no significant changes from the original drawings submitted at that time.

Please call if you have any questions. Thank you.

Sincerely,

Laurie B. Schuller

Job No. 3930
Attachments

AUG 07 1997
HYDROLOGY SECTION

Law Offices
MODRALL, SPERLING, ROEHL, HARRIS & SISK, P.A.
500 Fourth Street NW
Sunwest Building, Suite 900
Post Office Box 2168
Albuquerque, New Mexico 87103-2168

Las Cruces Santa Fe

Dale W. Ek
Telephone: (505) 848-1852
Fax: (505) 848-1891

August 6, 1997

Mr. Larry Blair
Executive Engineer
AMAFCA
2600 Prospect N.E.
Albuquerque, N.M. 87107

Re: **Unser Diversion Channel Letter of Map Revision**
Agreement for Atrisco Business Park Storm Water Improvements

Dear Mr. Blair:

On behalf of Sunwest Bank of Albuquerque, N.A., receipt is acknowledged dated July 30, 1997. In response thereto I have enclosed a Cashier Check (#380031) in the amount of $2,300.00 made payable to the National Flood Insurance Program.

Respectfully yours,

Dale W. Ek

DWE/cas
Enclosure
cc: Mr. Robert M. Goodman, President
Sunwest Bank of Albuquerque, N.A.

423445

AUG - 7 1997

SUNWEST BANKING SUNWEST BANKING SUNWEST BANKING SUNWEST BANKING SUNWEST

95-32-1070 380031

CASHIER'S CHECK

REMITTER Sunwest Bank

FOR Atrisco Business Park

SUNWEST

DATE 8-5-97

PAY The sum of 2,300dol's00cts $ ***2,300.00***

PAY TO THE ORDER OF National Flood Insurance Program

SUNWEST BANK OF ALBUQUERQUE
ALBUQUERQUE, NM 87108

BY J. R. Williams
AUTHORIZED SIGNATURE

⑈380031⑈ ⑆107000327⑆01 0962098 9⑈

August 6, 1997

Federal Emergency Management Agency
Region VI, Federal Center
800 North Loop 288
Denton, TX 76201

RE: Letter Of Map Revision (LOMR) for Unser Diversion
Submitted as Follow-up to CLOMR
Case No: 94-06-127R
Community: Albuquerque, New Mexico
Community No: 350002

Dear Sir or Madam:

The purpose of this letter is to request a Letter of Map Revision (LOMR) for the Unser Diversion and Atrisco Business Park. This request is being submitted as a follow-up to a Conditional Letter of Map Revision (CLOMR). The request for the CLOMR was submitted in January 1994 by Mr. Gilbert Aldaz, P.E., L.S., City/County Floodplain Administrator for the City of Albuquerque. Additional information was sent in March 1994 by Ms. Laurie Schuller, Project Engineer at *Easterling & Associates, Inc.* A CLOMR letter from Mr. Michael K. Buckley, P.E., Chief, Hazard Identification Branch, was received in April 1994.

In short, the Unser Diversion consists of a system of six detention ponds and connecting storm drains designed to intercept runoff reaching the western boundary of the Atrisco Business Park. The Atrisco Business Park is located in the southwest quadrant of Albuquerque, New Mexico.

Included with this request are the following:

1) Copy of FEMA CLOMR letter dated April 21, 1994 (Attached)
2) MT-2 Form 1 - Revision Requestor and Community Official Form (Attached)
3) MT-2 Form 2 - Certification by Registered Professional Engineer (Attached)
4) MT-1 Form 3 - Certification of Fill Placement (Attached)
5) Photographs of completed structures (Attached)
6) AMAFCA operations and maintenance procedures (Attached)
7) Copies of As-Built drawings for Unser Diversion (Supporting Document #1)
8) Copies of As-Built drawings for Airport Drive/Bluewater Road Storm Drain (Supporting Document #2)
9) Copies of As-Built drawings for Airport Drive Storm Drain Outfall (Supporting Document #3)
10) Copies of As-Built drawings for Airport Drive Storm Drain (Supporting Document #4)

The construction of Unser Diversion was completed in accordance with the design. The only variations from the construction plans were slight adjustments of storm drain inverts. Also, please note that although Sheet 13 of 25 is identified as "Addendum No. 1 Replacement Sheet," the only difference between this sheet and the original Sheet 13 is the dot pattern hatching that shows the limits of overexcavation for the berm. No physical changes were made on this sheet or during construction.

All undeveloped areas in the Atrisco Business Park were covered with terraced berms (conservation treatment). Construction of storm drain in Bluewater Road and Airport Drive was completed as initially designed. As-built drawings are included with this submittal.

The following documents were included in the January 1994 CLOMR request. The information that was provided in these documents has not changed and is still valid for this LOMR request. Therefore, they are not included with this submittal. Please refer to "Request for Conditional Letter of Map Revision for Unser Diversion and Atrisco Business Park", Easterling and Associates, Inc., January 1994.

1) Form 3 - Hydrologic Analysis Form
2) Form 4 - Riverine Hydraulic Analysis Form
3) Form 5 - Riverine/Coastal Mapping Form
4) Form 6 - Channelization Form
5) Form 7 - Bridge/Culvert Form
6) Form 8 - Levee/Floodwall System Analysis Form
7) Form 12 - Alluvial Fan Flooding Form

Enclosed is a check for $2,300.00 for the initial review for this LOMR request. If there are any questions about this submittal or additional information is needed, please do not hesitate to contact us by telephone at (505) 898-8021 or by facsimile at (505) 898-8501.

Sincerely,

Laurie B. Schuller
Project Engineer

LBS/nad
Project No. 3930
cc: Ms. Susan Calongne, P.E.,
City/County Floodplain Administrator
City of Albuquerque

Mr. Larry Blair, P.E.
Executive Engineer
Albuquerque Metropolitan Flood Control Authority

Federal Emergency Management Agency

Washington, D.C. 20472

APR 21 1994

RECEIVED
APR 25 1994

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

IN REPLY REFER TO:
Case No.: 94-06-127R

The Honorable Martin Chavez
Mayor, City of Albuquerque
P.O. Box 1293
Albuquerque, New Mexico 87103

Community: City of Albuquerque, New Mexico
Community No.: 350002

104

Dear Mayor Chavez:

This is in response to a letter dated March 9, 1994, from Ms. Laurie B. Schuller, Project Engineer, Easterling & Associates, Inc., to the Federal Emergency Management Agency (FEMA) regarding the effective Flood Insurance Rate Map (FIRM) and Flood Insurance Study (FIS) report for the City of Albuquerque, New Mexico. With her letter, Ms. Schuller provided additional information to support a January 20, 1994, request for a Conditional Letter of Map Revision (CLOMR) from Mr. Gilbert Aldaz, P.E., L.S., City/County Floodplain Administrator, City of Albuquerque. Mr. Aldaz requested that FEMA evaluate the effects that the following projects along Mirehaven Arroyos B and C would have on the effective FIRM: the proposed construction of a series of six retention ponds and the associated storm drain system (Unser Diversion); the proposed and as-built construction of a series of terraced berms; the proposed and as-built construction of storm drain systems along Airport Drive, Bluewater Road, and Unser Boulevard; and the proposed curb reconstruction along Bluewater Road. These projects are associated with the proposed construction of Atrisco Business Park.

All data required by FEMA to evaluate this request were submitted by Mr. Aldaz with his January 20 letter and by Ms. Schuller with her March 4 and March 9, 1994, letters. All fees necessary to process this CLOMR (a total of $2,880) have been received.

We have reviewed the data submitted and the flood data used to prepare the effective FIRM for the City of Albuquerque. We believe that if the proposed projects are constructed as described in the technical reports prepared by Easterling & Associates, Inc., entitled "CLOMR Request for Unser Diversion/ Atrisco Business Park," dated January 1994; "Draft Design Analysis Report for AMAFCA Unser Diversion," dated September 1993; and "Master Drainage Plan for the Atrisco Business Park," dated October 1993, and as shown in the following construction plans: "Construction Plans for AMAFCA Unser Diversion," prepared by Easterling & Associates, Inc., dated 1993, and "Construction Plans for the City of Albuquerque Airport Drive/Bluewater Road Storm Drain," prepared by the City of Albuquerque, dated April 1993, then the 100-year floodplain will be removed as shown on Plate 1 of 3 of the plans entitled "Unser Diversion Revised Floodplain Boundaries," prepared by Easterling & Associates, Inc., dated October 1993.

As a result of the proposed construction, the effective 100-year floodplain delineations along Mirehaven Arroyos B and C will be removed from the area bounded on the north by Interstate Highway 40, on the east by Airport Drive, on the south by Bluewater Road, and on the west by the Unser Diversion. In addition, the 100-year floodplain delineations will be removed from the area bounded on the north by the intersection of Bluewater Road and Airport Drive, and on the south by Avalon Road. The 100-year flood discharge will be contained in the Unser Diversion. Local drainage will be conveyed by the series of terraced berms north of Los Volcanoes Road and by storm drain systems and street right-of-ways along Airport Drive, Bluewater Road, and Unser Boulevard.

Upon completion of the project and receipt of the data listed below, we will make a final determination on revising the effective FIRM and FIS report.

- Please note that the National Flood Insurance Program (NFIP) is non-taxpayer funded and its expenses are paid for by policyholders. Therefore, to minimize the financial burden on the policyholders while maintaining the NFIP as self-sustaining, FEMA has implemented a procedure to recover costs associated with reviewing and processing requests for modifications to published flood information and maps. Therefore, an initial fee of $225, which represents the minimum charges associated with a request of this type, must be submitted before we can process your revision request. Payment of this fee shall be made in the form of a check or money order <u>made payable in U.S. funds to the National Flood Insurance Program</u>, or by credit card payment. The payment is to be forwarded to the following address:

  Federal Emergency Management Agency
  Revisions Fee-Collection System Administrator
  P.O. Box 3173
  Merrifield, Virginia 22116

- As-built plans, certified by a registered professional engineer, of all proposed project elements

- Certification that all fill placed in the currently effective 100-year floodplain and below the proposed base flood elevation is compacted to 95 percent of the maximum density obtainable with the Standard Proctor Test method issued by the American Society for Testing and Materials (ASTM Standard D-698) or an acceptable equivalent method for all areas to be removed from the 100-year floodplain

The basis of this CLOMR is a proposed channel-modification and culvert project. Paragraph 60.3(b)(7) of the NFIP regulations requires that communities "assure that the flood-carrying capacity within the altered or relocated portion of any watercourse is maintained." This provision is incorporated into your community's existing floodplain management regulations. Consequently, your community must agree to accept responsibility for the maintenance of the modified channel before allowing its construction.

This response to Mr. Aldaz's request is based on minimum floodplain management criteria established under the NFIP. Your community is responsible for approving all proposed floodplain development, including this request, and for assuring that the necessary permits required by Federal or State law have been received. State and community officials, based on knowledge of local conditions and in the interest of human safety, may set higher standards for construction or may limit development in floodplain areas. If the State of New Mexico or the City of Albuquerque has adopted more restrictive or comprehensive floodplain management criteria, those criteria take precedence over the minimum NFIP requirements.

Should you have any questions regarding this matter, please contact the Division Director, Mitigation Division of FEMA in Denton, Texas, at (817) 898-5127, or Mr. Alan Johnson of our staff in Washington, DC, either by telephone at (202) 646-3403 or by facsimile at (202) 646-3445.

Sincerely,

Michael K. Buckley, P.E., Chief
for Hazard Identification Branch
Mitigation Directorate

cc: Mr. Charles Easterling, P.E.
President
Easterling & Associates, Inc.

Ms. Laurie B. Schuller
Project Engineer
Easterling & Associates, Inc.

Mr. Gilbert Aldaz, P.E., L.S.
City/County Floodplain Administrator
City of Albuquerque

FEDERAL EMERGENCY MANAGEMENT AGENCY **REVISION REQUESTOR AND COMMUNITY OFFICIAL FORM**	*FEMA USE ONLY*	*O.M.B. No. 3067-0148* *Expires July 31, 1997*

PUBLIC BURDEN DISCLOSURE NOTICE

Public reporting burden for this form is estimated to average 2.13 hours per response. The burden estimate includes the time for reviewing instructions, searching existing data sources, gathering and maintaining the needed data, and completing and reviewing the form. Send comments regarding the accuracy of the burden estimate and any suggestions for reducing this burden, to: Information Collections Management, Federal Emergency Management Agency, 500 C Street, S.W., Washington, DC 20472.

You are not required to respond to this collection of information unless a valid OMB Control Number is displayed in the upper right corner of this form.

1. OVERVIEW

1. The basis for this revision request is (are): *(check all that apply)*
   - ☒ Physical change
     - ☒ Existing
     - ☐ Proposed
   - ☐ Improved methodology
   - ☐ Improved data
   - ☐ Floodway revision
   - ☐ Other _____

   Explain _____

2. Flooding Source: Shallow flooding from undeveloped upper watershed Minehaven Arroyos "B" & "C"
3. Project Name/Identifier: Unser Diversion, Atrisco Business Park
4. FEMA zone designations affected: AO, AH
   (example: A, AH, AO, A1 A30, A99, AE, V, V1-30, VE, B, C, D, X)
5. The NFIP map panel(s) affected for all impacted communities is (are):

Community No.	Community Name	County	State	Map No.	Panel No.	Effective Date
EX: 480301	Katy,City	Harris, Fort Bend	TX	480301	0005D	02/08/83
480287	Harris County	Harris	TX	48201C	0220G	09/28/90
350002	Albuquerque	Bernalillo	NM	350002	~~0027~~	~~10/14/83~~
					328	9-20-96
					329	9-20-96

6. The area of revision encompasses the following types of flooding, structures, and associated disciplines: *(check all that apply)*

Types of Flooding

- ☐ Riverine
- ☐ Coastal
- ☐ Alluvial Fan
- ☐ Shallow Flooding *(e.g. Zones AO and AH)*
- ☐ Lakes

Affected by wind/wave action
- ☐ Yes
- ☐ No

☐ Other(describe) _____

Structures

- ☐ Channelization
- ☐ Levee/Floodwall
- ☐ Bridge/Culvert
- ☐ Dam
- ☐ Coastal
- ☐ Fill
- ☐ Pump Station
- ☐ None
- ☐ Channel Relocation
- ☐ Excavation
- ☒ Other *(describe)* Retention/Detention Ponds with Storm Sewer Connections

Disciplines*

- ☐ Water Resources
  - ☒ Hydrology
  - ☒ Hydraulics
  - ☒ Sediment Transport
  - ☐ Interior Drainage
- ☐ Structural
- ☐ Geotechnical
- ☐ Land Surveying
- ☐ Other *(describe)*

*** Attach completed "Certification by Registered Professional Engineer and/or Land Surveyor" Form for each discipline checked. (Form 2)**

2. FLOODWAY INFORMATION

7. Does the affected flooding source have a floodway designated on the effective FIRM or FBFM? ☐ Yes ☐ No
8. Does the revised floodway delineation differ from that shown on the effective FIRM or FBFM ☐ Yes ☐ No
   If yes, give reason: N/A

PLEASE REFER TO THE INSTRUCTIONS FOR THE APPROPRIATE MAILING ADDRESS

Attach copy of either a public notice distributed by the community stating the community's intent to revise the floodway or a statement by the community that it has notified all affected property owners and affected adjacent jurisdictions. N/A

9 Does the State have jurisdiction over the floodway or its adoption by communities participating in the NFIP?
N/A ☐ Yes ☐ No

If yes, attach a copy of a letter notifying the appropriate State agency of the floodway revision and documentation of the approval of the revised floodway by the appropriate State agency.

3. PROPOSED ENCROACHMENTS

10. With floodways:

a. Does the revision request involve fill, new construction, substantial improvement, or other development in the floodway? ☐ Yes ☐ No N/A

b. If yes, does the development cause the 100-year water surface elevation to increase at any location by more than 0.000 feet? ☐ Yes ☐ No N/A

11. Without floodways.

a. Does the revision request involve fill, new construction, substantial improvement, or other development in the 100-year floodplain? ☒ Yes ☐ No

b. If yes, does the cumulative effect of all development that has occurred since the effective SFHA was originally identified cause the 100 year water surface elevation to increase at any location by more than one foot (*or other surcharge limit if community or state has adopted more stringent criteria*)? ☐ Yes ☒ No

If the answer to either Items 10b or 11b is yes, please provide documentation that all requirements of Section 65.12 of the NFIP regulations have been met, regarding evaluation of alternatives, notice to individual legal property owners, concurrence of CEO, and certification that no insurable structures are impacted.

4. REVISION REQUESTOR ACKNOWLEDGMENT

12. Having read NFIP Regulations, 44 CFR Ch. 1, parts 59, 60, 61, and 72, I believe that the proposed revision ☒ is ☐ is not in compliance with the requirements of the aforementioned NFIP Regulations.

5. COMMUNITY OFFICIAL ACKNOWLEDGMENT

13. Was this revision request reviewed by the community for compliance with the community's adopted floodplain management ordinances? ☒ Yes ☐ No

14. Does this revision request have the endorsement of the community? ☒ Yes ☐ No

If no to either of the above questions, please explain: _____

Please note that community acknowledgment and /or notification is required for all requests as outlined in Paragraph 65.4(b) of the NFIP Regulations.

6. OPERATION AND MAINTENANCE

15. Does the physical change involve a flood control structure (e.g., levees, floodwalls, channelization, basins, dams)?
☒ Yes ☐ No

If yes, please provide the following information for each of the new flood control structures:

A. Inspection of the flood control project will be conducted periodically by Albuquerque Metropolitan Arroyo Flood Control Authority (entity) with a maximum interval of 12 months between inspections. Please see attached Inspection Policy

B. Based on the results of scheduled periodic inspections, appropriate maintenance of the flood control facilities will be conducted by Albuquerque Metropolitan Arroyo Flood Control Authority (entity) to ensure the integrity and degree of flood protection of the structure. Please see attached Maintenance Policy

C. A formal plan of operation, including documentation of the flood warning system, specific actions and assignments of responsibility by individual name or title, and provisions for testing the plan at intervals not less than 1 year, ☐ has ☒ has not been prepared for the flood control structure. *

* Please see attached Operation Policy and Emergency Operations Plan

D. The community is willing to assume responsibility for ☒ performing ☒ overseeing compliance with the maintenance and operation plans of the Unser Diversion
(Name)

flood control structure. If not performed promptly by an owner other than the community, the community will provide the necessary services without cost to the Federal Government.

Attach operation and maintenance plans

7. REQUESTED RESPONSE FROM FEMA

16. After examining the pertinent NFIP regulations and reviewing the document entitled "Appeals, Revisions, and Amendments to National Flood Insurance Program Maps, A Guide for Community Officials," dated December 1993, this request is for a:

_____a.	CLOMR	A letter from FEMA commenting on whether a proposed project, if built as proposed, would justify a map revision *(LOMR or PMR)*, or proposed hydrology changes *(see 44 CFR Ch. I, Parts 60, 65, and 72)*.
X b.	LOMR	A letter from FEMA officially revising the current NFIP map to show changes to floodplains, floodways, or flood elevations. LOMRs typically depict decreased flood hazards. *(See 44 CFR Ch. I Parts 60 and 65.)*
_____c.	PMR	A reprinted NFIP map incorporating changes to floodplains, floodways, or flood elevations. Because of the time and cost involved to change, reprint, and redistribute an NFIP map, a PMR is usually processed when a revision reflects increased flood hazards or large-scope changes. *(See 44 CFR Ch. I, Parts 60 and 65.)*
_____d.	Other:	Describe_____

8. FORMS INCLUDED

17. Form 2 entitled, "Certification By Registered Professional Engineer and/or Land Surveyor" must be submitted.

The following forms should be included with this request if (check the included forms):

• Hydrologic analysis for flooding source differs from that used to develop FIRM	☐ Hydrologic Analysis Form (Form 3)
• Hydraulic analysis for riverine flooding differs from that used to develop FIRM	☐ Riverine Hydraulic Analysis Form (Form 4)
• The request is based on updated topographic information or a revised floodplain or floodway delineation is requested	☐ Riverine /Coastal Mapping Form (Form 5)
• The request involves any type of channel modification	☐ Channelization Form (Form 6)
• The request involves new bridge or culvert or revised analysis of an existing bridge or culvert	☐ Bridge/Culvert Form (Form 7)
• The request involves a new revised levee/floodwall system	☐ Levee/Floodwall System Analysis Form (Form 8)
• The request involves analysis of coastal flooding	☐ Coastal Analysis Form (Form 9)
• The request involves coastal structures credited as providing protection from the 100-year flood	☐ Coastal Structures (Form 10)
• The request involves an existing, proposed, or modified dam	☐ Dam Form (Form 11)
• The request involves structures credited as providing protection from the 100-year flood on an alluvial fan	☐ Alluvial Fan Flooding Form (Form 12)

9. INITIAL REVIEW FEE

18. Has the minimum initial review fee for the appropriate request category been included? ☒ Yes ☐ No

Initial fee amount. $ 2,300

Check or money order only. Make check or money order payable to : **National Flood Insurance Program.** If paying by Visa or Mastercard please refer to the credit card information form which follows this form.

or

19. Is this request for a project that is for public benefit and is primarily intended for flood loss reduction to insurable structures in identified flood hazard areas which were in existence prior to the commencement of construction of the flood control project? ☐ Yes ☒ No

or

20. Is this request to correct map errors, to include the effects of natural changes within the areas of special flood hazard, or solely to provide more detailed data? ☐ Yes ☒ No

Note: I understand that my signature indicates that all information submitted in support of this request is correct.

Signature of Revision Requester

Larry A. Blair, Executive Engineer
Printed Name and Title of Revision Requester

Albuquerque Metropolitan Arroyo Flood Control Authority
Company Name

505-884-2215
Telephone No

July 29, 1997
Date

Note: Signature indicates that the community understands, from the revision requester, the impacts of the revision on flooding conditions in the community.

Signature of Community Official

SUSAN CALONGNE
CITY/COUNTY FLOODPLAIN ADMIN.
Printed Name and Title of Community Official

City of Albuquerque, New Mexico
Community Name

8-21-97
Date

Does this request impact any other communities? ☐ Yes ☒ No

If yes, attach letters from all affected jurisdictions acknowledging the revision request and approving the changes to the floodway, if applicable.

Note: Although a photograph of physical changes is not required, it may be helpful for FEMA's review.

FEDERAL EMERGENCY MANAGEMENT AGENCY **CERTIFICATION BY REGISTERED PROFESSIONAL ENGINEER AND/OR LAND SURVEYOR FORM**	*FEMA USE ONLY*	*O.M.B. No. 3067-0148* *Expires July 31, 1997*

PUBLIC BURDEN DISCLOSURE NOTICE

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1. This certification is in accordance with 44 CFR Ch. I, Section 65.2
2. I am licensed with expertise in Civil Engineering, Water Resources-Hydrology, Hydraulics, Sediment Transport
   [example: water resources (*hydrology, hydraulics, sediment transport, interior drainage*)* structural, geotechnical, land surveying.]
3. I have 23 years experience in the expertise listed above.
4. I have ☐ prepared ☒ reviewed the attached supporting data and analyses related to my expertise.
5. I ☒ have ☐ have not visited and physically viewed the project.
6. In my opinion, the following analyses and /or designs, is/are being certified.
   Construction of Unser Diversion Flood Control Structure
7. Based on the following review, the modifications in place have been constructed in general accordance with plans and specifications.

   Basis for above statement: (check all that apply)
   - a ☐ Viewed all phases of actual construction.
   - b ☒ Compared plans and specifications with as-built survey information.
   - c. ☒ Examined plans and specifications and compared with completed projects.
   - d ☐ Other (*Specify*) _____

8. All information submitted in support of this request is correct to the best of my knowledge. I understand that any false statement may be punishable by fine or imprisonment under Title 18 of the United States Code, Section 1001.

Name: Charles M. Easterling
(please print or type)

Title: President, Easterling & Associates, Inc.
(please print or type)

Registration No 6411 Expiration Date: 12-31-97

State New Mexico

Type of License Professional Engineer

Signature

6-20-97
Date

CHARLES M. EASTERLING
NEW MEXICO
6411
REGISTERED PROFESSIONAL ENGINEER

Seal
(*Optional*)

*Specify Subdiscipline

Note: Insert not applicable (N/A) if statement does not apply.

PLEASE REFER TO THE INSTRUCTIONS FOR THE APPROPRIATE MAILING ADDRESS

FEDERAL EMERGENCY MANAGEMENT AGENCY **CERTIFICATION OF FILL PLACEMENT**	**FEMA USE ONLY**	*O.M.B. No. 3067-0147* *Expires 31 July 1997*

PUBLIC BURDEN DISCLOSURE NOTICE

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You are not required to respond to this collection of information unless a valid OMB Control Number is displayed in the upper right corner of this form.

Albuquerque, New Mexico
Community Name

Atrisco Business Park
Property Name or Address

The Fill is: ☒ Existing ☐ Proposed

I hereby certify that fill placed on the property to raise the ground surface to or above the base *(100-year)* flood elevation in order to gain exclusion from a Special Flood Hazard Area *(100-year floodplain)* meets the criteria of Title 44 of the Code of Federal Regulations, Section 65.5(a)(6), listed below. For proposed fill, I hereby certify that it is designed in accordance with these criteria.

1. That the fill has been compacted to 95 percent of the maximum density obtainable with the Standard Proctor Test method or an acceptable equivalent method for *(check one of the following)*

X* a. Fill pads prepared for the foundations of residential or commercial structures

*Fill placed in the currently effective 100-year floodplain and below the proposed base flood elevation.

____ b. Entire legally defined parcel *(Note: if the location of fill pads has not been determined, the fill over the entire legally defined parcel must be compacted to the above criteria).*

Charles M. Easterling, P.E.
Name (Please print or type)

Signature

6-20-97
Date

Community Official's Title or Engineer's Seal/Registration Number

CHARLES M. EASTERLING
NEW MEXICO
6411
REGISTERED PROFESSIONAL ENGINEER

2. That fill slopes for granular materials are not steeper than one vertical on one-and-one-half horizontal *(steeper slopes must be justified)*; and

3. That adequate erosion protection is provided for fill slopes exposed to moving flood waters *(slopes exposed to flows with velocities of up to 5 feet per second (fps) during the 100-year flood must, at a minimum, be protected by a permanent cover of grass, vines, weeds, or similar vegetation; slopes exposed to flows with velocities greater that 5 fps during the 100-year flood must, at a minimum, be protected by appropriately designed stone, rock, concrete, or other durable products).*

Charles M. Easterling, P.E.
Name (Please print or type)

Signature

6-20-97
Date

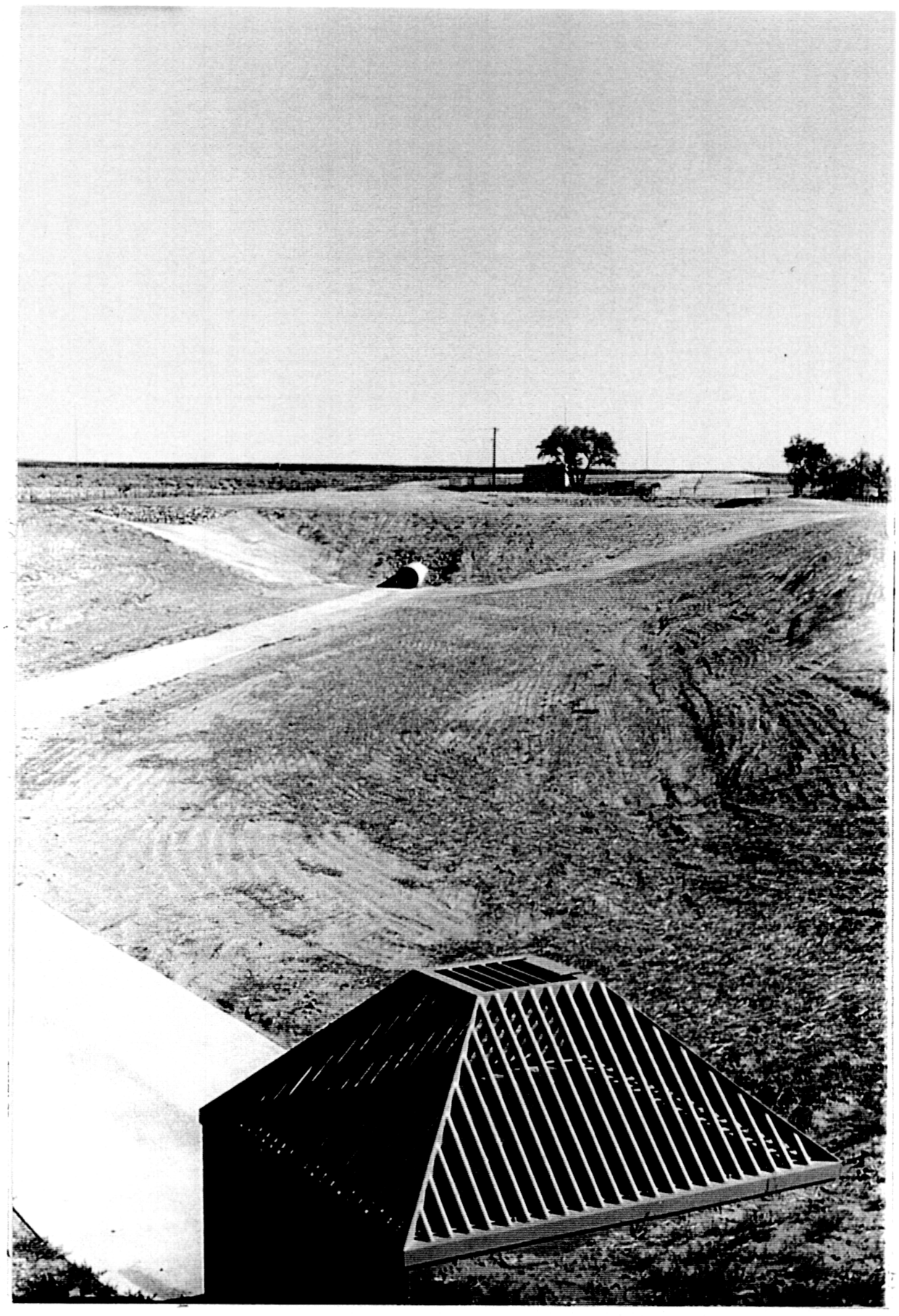
Community Official's Title or Engineer's Seal/Registration Number

CHARLES M. EASTERLING
NEW MEXICO
6411
REGISTERED PROFESSIONAL ENGINEER

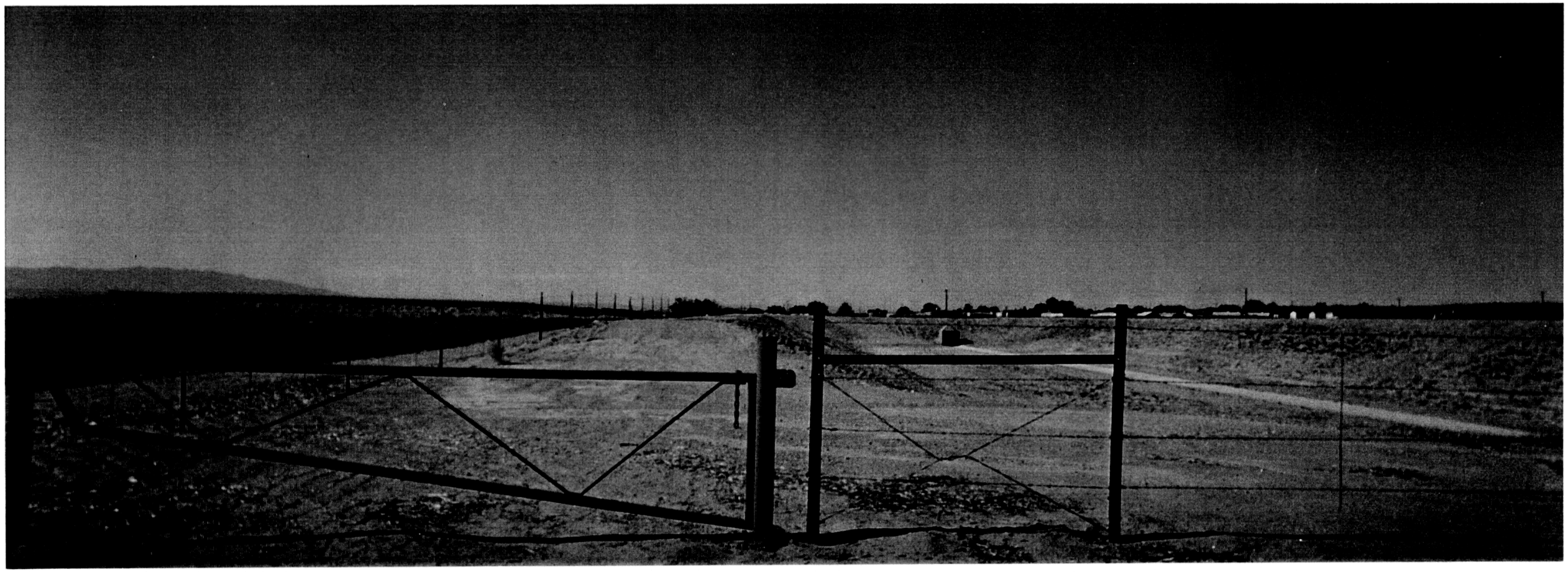
PLEASE REFER TO THE INSTRUCTIONS FOR THE APPROPRIATE MAILING ADDRESS

Standing on South Bank of Pond 3
Looking North at Outlet Pipe from Pond 4

Standing on Southwest Corner of Pond 3, Looking Northeast



Standing on South Bank of Pond 3
Looking North from Intake Structure



Standing on North Bank of Pond 2, Looking South Along Maintenance Access Road

PROJECT INSPECTIONS

1. Definitions:

   a. **Inspection.** Examination of an Authority facility to ensure its proper operation and to identify needed maintenance and repairs.

2. Procedures

   a. Intervals

      1) A detailed, formal inspection of each Authority facility will be made at least once per year, normally in the spring before flood season. This inspection will be accomplished using a check list (See Inspection Guides and Checklists file). Certain facilities (e.g., NDC and SDC) require more frequent inspections.

      2) An inspection will be conducted after each major storm event which affects a flood control facility, with the primary objective being to identify immediate measures needed to restore the facility's ability to function as designed.

      3) An informal inspection of each facility will be conducted, normally in the fall. The formal checklist is not required, but written record will be made.

      4) Conduits will be physically inspected (crawl-through) every two years (even-numbered years).

   b. Records

      1) Formal checklists will be completed, reviewed by the Executive Engineer, and filed in each facility's OMI folder.

      2) Sheet G-2 (required Maintenance/Repairs) will be duplicated, with a copy to the Maintenance Tasks/Backlog Folder and a copy to the Maintenance Foreman, to serve as a work directive.

      3) Results of informal inspections will be reported by informal notes, or in briefings to the Executive Engineer.

      4) The Field Engineer is responsible for developing inspection schedules.

      5) Progress on inspections will be reported monthly to the Executive Engineer.

3. As a matter of professional courtesy, and when convenient, AMAFCA personnel will informally inspect drainage facilities owned by other public agencies, and advise them of problems.

May 1993
Date

Executive Engineer

PROJECT MAINTENANCE

1. Definition: Maintenance is defined as all measures taken to ensure that each facility will operate as intended and designed, and includes repairs, improvements, and all measures taken to assure that public welfare and safety are protected.

2. General:

   a. Maintenance and repairs will be accomplished by the most expeditious and cost-effective means. Both in-house forces and contractors may be used.

   b. Priority of effort will be:

      1) Correction of problems which could lead to failure and subsequent loss of life or major property damage (e.g., concrete channel repairs, blockages of outlets and channels)

      2) Installation or repair of features to protect public safety (e.g., guardrails, traffic barriers, reflectors, delineators)

      3) Repairs which are necessary to prevent deterioration to a condition which could lead to failure (e.g., serious erosion, gabion repairs)

      4) Work to maintain stormwater capacity (e.g., sediment, vegetation, and trash removal)

      5) Routine maintenance (e.g., normal erosion, replacement of riprap, concrete joint repairs)

      6) Minor/esthetic maintenance (e.g., minor sediment, graffiti)

3. Guidelines for allocation of effort:

   a. In-House crew

      1) Emergencies

      2) Safety - installation of new safety features; maintenance and upgrade of existing

      3) Inspection

      4) Concrete repair, except large jobs

      5) Jobs for which crew has experience, (e.g., silt removal in sensitive locations (Alameda Outlet Structure, NDC))

6) Routine and repetitive tasks

7) Short duration jobs (2 or less weeks duration)

b. Contractors

1) Production jobs, (e.g., larger dirt or silt moving)

2) Specialized tasks for which we lack in-house expertise and/or equipment

3) Appropriate backlog tasks which cannot be scheduled in a timely manner by Maintenance Crew

c. Other

1) Contractors and others may remove sediment from AMAFCA facilities, with written permission and assurance of adequate insurance. Permits may be issued by the Business Manager after appropriate approval by either the Executive Engineer, Field Engineer, and/or Maintenance Foreman.

2) Assisting others, (e.g., providing silt. See Resolution 1991-10)

4. Administration and Records

a. The Field Engineer and Maintenance Foreman will develop annual and monthly maintenance (including safety) schedules.

b. Insofar as possible, records of maintenance work (written, photographic, costs) will be kept in each project OMI folder.

c. Field Engineer and Maintenance Foreman will brief Executive Engineer monthly on accomplishments, schedule(s), safety, and other matters of interest. It is the Field Engineer's responsibility to schedule these meetings.

May, 1993
Date

Executive Engineer

PROJECT OPERATIONS

1. Definitions:

   a. **Operations.** Within the context of "Operations, Maintenance, and Inspection," Operations is defined as the functioning of a flood control facility during or immediately after a storm. It includes the opening/closing of gates, valves, outlet works (if the facility has them) and may also involve hasty or emergency measures, if necessary to ensure proper functioning of the facility.

   b. **Emergency Operations.** See Emergency Operations Plan No. 3, dated August, 1988.

2. General: During rainstorms, AMAFCA personnel, as needed or directed, will observe and monitor flood control facilities to ensure their proper operation.

3. Specific Instructions:

   a. As weather conditions dictate, AMAFCA personnel will travel to affected areas or flood control facilities, with radio-equipped vehicles. This procedure will be in effect during both on- and off-duty hours.

   b. Through communications, facilities affected will be identified, and closely monitored for proper operation and safety. Additional Authority forces will be called out, as required.

   c. Photographs will be taken, where possible.

   d. Flow or detention dam stages (depths) and times will be recorded.

   e. Notes of project operation characteristics will be made, particularly where unusual conditions may be noted.

   f. If necessary, assist police and rescue forces, as needed.

   g. Following storms, project OMI folders will be updated with information gathered during the operation, and any remedial actions immediately planned and executed.

   h. After a facility has functioned from stormwater, at the first opportunity, a detailed inspection will be made by an Authority engineer. Use of a checklist is recommended.

4. Preparatory Instructions:

a. Before each flood season, the following will be accomplished:

1) Stock adequate supplies of film (Foreman).

2) Ensure vehicles, radios, searchlights, etc., are in good condition (Foreman).

3) Repaint, as needed, depth gauges (Foreman).

4) Ensure all gates, valves, outlet works function properly, and keep wheels and cranks properly stored (Field Engineer, Foreman).

5) Keep cameras, flashlights, spray paint, rescue equipment available in vehicles (Field Engineer, Foreman).

b. During the flood season, the following applies:

1) Vacations and absences will be limited and controlled. (All, especially field personnel).

2) A daily assessment of storm potential will be made, and plans for response discussed (Field Engineer, Foreman).

3) Maintenance Foreman will take home a radio-equipped Authority vehicle during the period June 1 through September 30. (See Memo dated May 2, 1984).

4) Continuous inspections of Authority flood control facilities will be made. Secondary, incidental inspections may be made of facilities owned/operated by others to ensure complementary safe operation.

May, 1993
Date

Executive Engineer

ALBUQUERQUE METROPOLITAN ARROYO FLOOD CONTROL AUTHORITY (AMAFCA)

EMERGENCY OPERATIONS PLAN
REVISION NO. 3

AUGUST 1988

1. PURPOSE: This plan provides a framework for action in the event of a major flood emergency.

2. MISSION: Operate AMAFCA projects to minimize loss of life and property damage. Restore damaged flood control facilities to operation as soon as possible. Assist City, County, State Highway Department and Middle Rio Grande Conservancy District.

3. SPECIFIC INSTRUCTIONS:

   a. Executive Engineer

      (1) Direct AMAFCA activities

      (2) Coordinate with City, County, State Highway Department and Middle Rio Grande Conservancy District

      (3) Arrange State and Federal assistance

   b. Field Engineer

      (1) Direct field activities

      (2) Inspect or cause to be inspected all critical AMAFCA facilties

      (3) Instruct Maintenance Foreman as to priorities and provide technical guidance

      (4) Recommend to Executive Engineer emergency projects for contracting out

      (5) As time permits, inspect critical flood control facilities managed by City and others

   c. Drainage Engineer

      (1) Assist in inspection of critical AMAFCA facilities

      (2) Mobilize contractors and consultants for emergency damage repair projects

      (3) Execute and administer contracts for emergency work

   d. Real Estate officer

      (1) Arrange photographic coverage of flooding and flood damage

      (2) Assist Executive Engineer as directed

e. Maintenance Foreman

(1) Deploy men and equipment to ensure that AMAFCA dams, channels, and other projects operate as designed

(2) Maintain communication (radio or telephone) with AMAFCA office

(3) Advise Field Engineer where contractor support is required

f. Maintenance Crew

(1) Report to office. If delayed, telephone in

(2) Follow instructions of Maintenance Foreman or Field Engineer

g. Business Manager

(1) Manage AMAFCA office as an Emergency Operations Center

(2) Maintain radio and telephone contact with Executive Engineer and field personnel

(3) Keep Board of Directors informed. As directed by Executive Engineer, poll Board by telephone to authorize emergency purchases, contracts and other activities

(4) Provide information to press

(5) Assist Drainage Engineer in executing emergency contracts

h. Secretary

(1) Support the Business Manager

4. ADMINISTRATION AND LOGISTICS: Responsibility of Business Manager

5. COMMUNICATIONS AND CONTROL:

a. AMAFCA

(1) Office telephone: (505) 884-2215;
Home telephones: Attached

(2) Radio: High Band; Receive 453.625 mHz.
Transmit 458.625 mHz.

(3) Address: 2600 Prospect Avenue NE
(South of Menaul off Vassar) 87107

b. Field and mobile units maintain radio contact with AMAFCA office

c. All personnel advise Executive Engineer of severe flooding or predicted severe flooding (Home Phone: 821-1386)

d. Normal chain-of-command applies

AMAFCA EMPLOYEE LIST
February 13, 1996

NAME AND ADDRESS	PHONE
ohn Aragon (Trish) 2510 Tramway Terrace 87122	856-1101
John Baca (Pam) 7409 Raymond Drive, NE 87109	858-0842
Larry A. Blair (Kathy) 7309 Luella Anne NE 87109	821-1386
Kurt Browning (Karen) 9515 Admiral Lowell Ave., NE 87111	822-8422
Martin W. Eckert, Jr. (Sandy) 7110 Edwina Court, NE 87110	888-2099
Herman Gabaldon (Ramona) 311 9th Street, SW 87102	242-4373
Max Jaramillo (Rita) 1800 Towner NW 87104	344-5127
Irene Jeffries (Ken) 708 Washington NE 87110	255-7740
John P. Kelly (Susan) 34 El Paraiso NW 87107	344-4353
Mariano Lucero (Sally) Box 4-C, Canyon RT Jemez Pueblo, NM 87024	1-829-3582
Lois A. Raye	891-1685 891-7676 (E
Henry R. Saavedra (Roseann) 214 Sierra Place NE 87108	255-5262 877-7754
Andy L. Sedillo (Marga) PO Box 1380 Bernalillo, NM 87004	867-2877
Larry B. Trujillo (Anna) 2609 Foothill Drive SW 87105	877-8337
Pat Trujillo Box 17-A, Canyon RT Jemez Pueblo 87024	1-829-3135
Cresencio Wiggins 2509 Hurley NW 87120	831-3603

RESOLUTION 1982-7

FLOOD EMERGENCIES AND DISASTER RECOVERY

WHEREAS, the Authority was created to provide health, safety, prosperity, security, and general welfare; and

WHEREAS, the Board of Directors desires to minimize reaction time during emergencies.

NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF DIRECTORS:

A. The Executive Engineer is authorized to take the following actions in the event of a flood emergency:

1. To declare a state of emergency.
2. To act as the agent for the Authority in seeking financial and other assistance from National, State, and local sources.
3. To coordinate disaster recovery operations with other governmental entities, industrial and commercial firms, and private individuals.
4. To take other actions consistent with protecting life and property.

B. The Executive Engineer is directed to promptly notify the Board of Directors of flood disasters and of emergency actions taken. Such notification may be by telephone, special Board meetings, or other means as the situation warrants.

SIGNED, SEALED, AND ADOPTED this 24th day of June, 1982.

Chairman, Board of Directors

(SEAL)

ATTEST:

Frances M. McCoy
Secretary

Unser Diversion LOMR
Albuquerque, New Mexico
Supporting Document #1

CONSTRUCTION PLANS FOR

ALBUQUERQUE METROPOLITAN ARROYO FLOOD CONTROL AUTHORITY

UNSER DIVERSION

GENERAL NOTES

1. ALL WORK DETAILED ON THESE PLANS, EXCEPT AS OTHERWISE STATED OR PROVIDED HEREON WITHIN THE PROJECT CONTRACT DOCUMENTS AND SPECIFICATIONS, SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE NEW MEXICO STATE HIGHWAY DEPARTMENT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION 1994 EDITION.

2. ALL STORM DRAIN CONSTRUCTION AND WORK REQUIRED ON THE WATERLINE OWNED BY THE CITY OF ALBUQUERQUE, EXCEPT WHERE REVISED OR AMENDED BY THESE PLANS AND SPECIFICATIONS, SHALL BE DONE IN ACCORDANCE WITH THE TECHNICAL SPECIFICATIONS, STANDARD DRAWINGS, AND SECTIONS 13 AND 18 OF THE GENERAL CONDITIONS OF THE CITY OF ALBUQUERQUE'S STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, 1988 EDITION AS AMENDED THROUGH UPDATE NO. 5.

3. TWO (2) WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTACT ONE CALL SYSTEM, INC., 260-1990, FOR LOCATION OF EXISTING UTILITIES.

4. THESE DRAWINGS REFLECT INFORMATION ON UTILITIES GATHERED BY SITE INSPECTION, DISCUSSIONS WITH MUNICIPAL OFFICIALS, AND PREVIOUS CONSTRUCTION DRAWINGS. IT IS POSSIBLE THAT THE EXACT LOCATION OF LINES AND UTILITY CONNECTION POINTS IN THE VICINITY OF THE REQUIRED WORK MAY BE DIFFERENT FROM THE LOCATION SHOWN ON THESE DRAWINGS. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE HORIZONTAL AND VERTICAL LOCATIONS OF ALL OBSTRUCTIONS. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER SO THAT THE CONFLICT CAN BE RESOLVED WITH A MINIMUM AMOUNT OF DELAY.

5. ALL GAS, ELECTRIC, TELEPHONE LINES, CABLES, AND APPURTENANCES ENCOUNTERED DURING CONSTRUCTION THAT REQUIRE RELOCATION SHALL BE RELOCATED BY THE RESPECTIVE UTILITY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION OF ALL NECESSARY UTILITY RELOCATIONS AND ADJUSTMENTS TO GRADE.

6. IT WILL BE THE CONTRACTOR'S RESPONSIBILITY TO PROTECT AND MAINTAIN IN SERVICE ALL EXISTING UTILITIES.

7. ALL WORK ON THIS PROJECT SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE, AND LOCAL LAWS, RULES, AND REGULATIONS CONCERNING CONSTRUCTION SAFETY AND HEALTH. THESE DRAWINGS DO NOT INCLUDE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY WHICH SHALL REMAIN THE CONTRACTOR'S RESPONSIBILITY.

8. ALL EXCAVATION/CONSTRUCTION PERMITS WILL BE REQUIRED BEFORE BEGINNING ANY WORK WITHIN THE CITY RIGHT-OF-WAY. AN APPROVED COPY OF THESE PLANS MUST BE SUBMITTED AT THE TIME OF APPLICATION FOR PERMITS.

9. THE CONTRACTOR SHALL EXERCISE REASONABLE CARE DURING CONSTRUCTION TO PREVENT THE MOVEMENT OF SEDIMENT FROM THE SITE INTO EXISTING STREETS OR ABUTTING PROPERTY. LOOSE SOIL STOCKPILES DURING CONSTRUCTION ACTIVITIES SHALL BE PROMPTLY CLEANED UP OR PROTECTED FROM BEING CARRIED DOWNSTREAM BY FLOWING WATER.

10. EXCEPT FOR THE STOCKPILE AREA SHOWN ON SHEET 2, ALL UNPAVED AREAS DISTURBED BY THE CONTRACTORS WORK SHALL BE REVEGETATED IN ACCORDANCE WITH THE TECHNICAL SPECIFICATION SECTION 1012 IN THE CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, 1988 EDITION, AS AMENDED THROUGH UPDATE No. 5.

11. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DISPOSAL OF ALL WASTE OR UNSUITABLE MATERIAL. A DISPOSAL SITE FOR ALL WASTE MATERIAL, INCLUDING TRASH THAT EXISTS ON THE SITE, SHALL BE OBTAINED BY THE CONTRACTOR IN COMPLIANCE WITH APPLICABLE ENVIRONMENTAL REGULATIONS AND APPOVED BY THE FIELD ENGINEER. ALL COSTS INCURRED IN OBTAINING A DISPOSAL SITE AND HAUL THERETO SHALL BE CONSIDERED INCIDENTAL TO THE PROJECT AND NO SEPARATE MEASUREMENT OR PAYMENT SHALL BE MADE.

12. THE CONTRACTOR WILL BE REQUIRED TO CONFINE HIS WORK WITHIN THE EASEMENT LIMITS AND / OR PUBLIC RIGHT-OF-WAY TO PRESERVE EXISTING VEGETATION AND PRIVATE PROPERTY. THE CONTRACTOR SHALL NOT STORE ANY EQUIPMENT OR MATERIAL WITHIN THE RIGHT-OF-WAY UNLESS THE EQUIPMENT OR MATERIAL IS PROPERLY SHIELDED UTILIZING CURRENT SAFETY DESIGN AND INSTALLATION METHODS. THE SAFETY DESIGN FOR THIS SHIELDING SHALL BE PROVIDED BY THE CONTRACTOR AND MUST BE APPROVED BY THE CITY OF ALBUQUERQUE BEFORE IMPLEMENTING. THERE WILL BE NO DIRECT MEASUREMENT OR PAYMENT FOR THE DESIGN, MATERIALS, INSTALLATION, AND REMOVAL OF THE SAFETY BARRIER.

13. CONTRACTOR SHALL MAINTAIN ACCESS TO ADJACENT PROPERTIES DURING CONSTRUCTION.

14. CONTRACTOR SHALL COORDINATE WITH THE CITY OF ALBUQUERQUE WATER SYSTEMS DIVISION A MINIMUM OF THREE (3) WORKING DAYS PRIOR TO INITIATING ANY WORK AFFECTING ANY EXISTING PUBLIC OR PRIVATE WATERLINES.

15. THIS DOCUMENT, AND THE IDEAS AND DESIGNS INCORPORATED HEREIN, ARE INTENDED FOR USE ON THIS PROJECT AND IS NOT TO BE USED, IN WHOLE OR IN PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF EASTERLING & ASSOCIATES, INC. IN THE EVENT OF UNAUTHORIZED USE, THE USER ASSUMES ALL RESPONSIBILITY AND LIABILITY WHICH RESULTS.

16. CONTRACTOR SHALL NOTIFY THE ENGINEER NOT LESS THAN SEVEN (7) DAYS PRIOR TO STARTING WORK IN ORDER THAT THE ENGINEER MAY TAKE NECESSARY MEASURES TO INSURE THE PRESERVATION OF SURVEY MONUMENTS. CONTRACTOR SHALL NOT DISTURB PERMANENT SURVEY MONUMENTS WITHOUT THE CONSENT OF THE ENGINEER AND SHALL NOTIFY THE ENGINEER AND BEAR THE EXPENSE OF REPLACING ANY THAT MAY BE DISTURBED WITHOUT PERMISSION. REPLACEMENT SHALL BE DONE ONLY BY THE ENGINEER. WHEN A CHANGE IS MADE IN THE FINISHED ELEVATION OF THE PAVEMENT OR ANY ROADWAY IN WHICH A PERMANENT SURVEY MONUMENT IS LOCATED, CONTRACTOR SHALL, AT HIS OWN EXPENSE, ADJUST THE MONUMENT COVER TO THE NEW GRADE UNLESS OTHERWISE SPECIFIED.

17. MANHOLE STEPS WILL BE INSTALLED IN ALL STORM DRAIN MANHOLES AND JUNCTION BOXES AND CATCH BASINS. THIS WORK SHALL BE CONSIDERED INCIDENTAL TO OTHER CONTRACT ITEMS AND NO SEPARATE MEASUREMENT OR PAYMENT SHALL BE MADE.

18. THE CONTRACTOR SHALL ADEQUATELY SUPPORT AND PROTECT EXISTING UTILITIES AFFECTED BY THE CONTRACTORS EXCAVATION ACTIVITY. IN THE EVENT THAT EXISTING UTILITIES ARE DAMAGED BY THE CONTRACTORS OPERATIONS, THE CONTRACTOR SHALL ARRANGE FOR AND COORDINATE PROMPT REPAIR BY THE RESPECTIVE UTILITY AND SHALL BEAR THE COST OF REPAIRS.

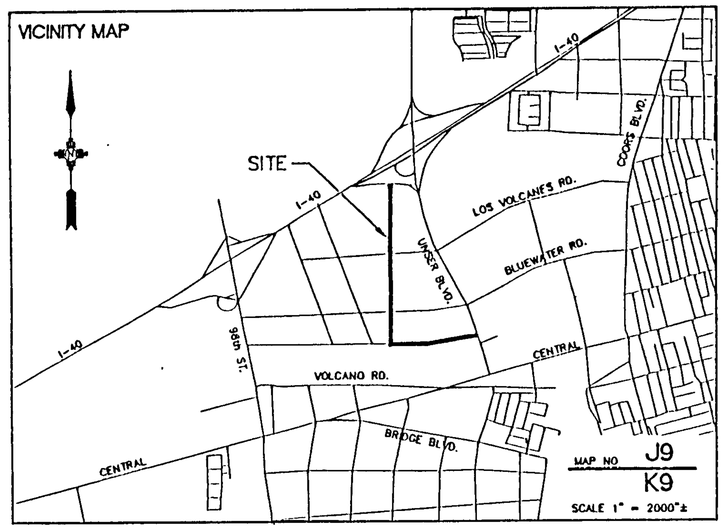
19. THE CONTRACTOR SHALL REMOVE AND REPLACE ALL SECTIONS OF EXISTING PAVING, CURB, AND GUTTER, AND OR SIDEWALK DAMAGED DURING CONSTRUCTION OF THE PROJECT. THIS WORK SHALL BE PERFORMED AT NO COST TO THE OWNER.

20. ALL TRENCH EXCAVATION AND RELATED WORK SHALL BE PERFORMED IN ACCORDANCE WITH ALL APPLICABLE OSHA, STATE, AND LOCAL REGULATIONS, LAWS AND ORDINACES.

21. THE FOLLOWING DOCUMENTS PROVIDED THE BASIS FOR DESIGN OF THE PROJECT.
    1. MASTER DRAINAGE PLAN FOR THE ATRISCO BUSINESS PARK, OCTOBER 1993, EASTERLING AND ASSOCIATES.
    2. DESIGN ANALYSIS FOR THE AMAFCA, UNSER DIVERSION, SEPTEMBER 1993, EASTERLING AND ASSOCIATES.
    3. REQUEST FOR CONDITIONAL LETTER OF MAP REVISION FOR THE UNSER DIVERSION AND THE ATRISCO BUSINESS PARK, JANUARY 1994, EASTERLING AND ASSOCIATES
    4. CONDITIONAL LETTER OF MAP REVISION FOR THE UNSER DIVERSION AND ATRISCO BUSINESS PARK, APRIL 1994, FEDERAL EMERGENCY MANAGEMENT AGENCY.

CHARLES M. EASTERLING NEW MEXICO 8411 REGISTERED PROFESSIONAL ENGINEER

VICINITY MAP



SHEET INDEX

1. COVER PAGE
2. KEY MAP, UTILITY CONTACTS AND STOCKPILE SECTIONS
3. STORM DRAIN – PLAN AND PROFILE
4. STORM DRAIN – PLAN AND PROFILE
5. STORM DRAIN/POND CONNECTIONS – PLAN AND PROFILE
6. STORM DRAIN/POND CONNECTIONS – PLAN AND PROFILE
7. EARTHEN CHANNEL – PLAN AND PROFILE
8. POND 1 – GRADING PLAN
9. POND 2 – GRADING PLAN
10. POND 3 – GRADING PLAN
11. POND 4 – GRADING PLAN
12. POND 5 – GRADING PLAN
13. POND 6 – GRADING PLAN
14. OUTLET STRUCTURE – DETAILS AND SECTIONS
15. OUTLET STRUCTURE TRASH RACK – DETAILS AND SECTIONS
16. RUNDOWN STRUCTURE DETAILS AND SECTIONS
17. RUNDOWN STRUCTURE DETAILS AND SECTIONS
18. MISCELLANEOUS DETAILS AND SECTIONS
19. FENCE DETAILS AND LOW FLOW CHANNEL DETAILS

20.–25. PROJECT PLAT

RECORD DRAWING

I, Charles M. Easterling, hereby certify that these drawings has been revised in accordance with the information furnished by Surv-Tek, Inc. to reflect the construction as actually accomplished

Charles M. Easterling, P.E. — Date 5-8-97
N.M.P.E. No. 8411

REV.	SHEETS	CITY ENGINEER	DATE	USER DEPARTMENT	DATE	USER DEPARTMENT	DATE

APPROVAL OF REVISIONS

ABBREVIATIONS

AC	– ASBESTOS CEMENT	DD	– DEFLECT DOWN	FO	– FIBER OPTIC CABLE	PRC	– POINT OF REVERSE CURVATURE	SAS	– SANITARY SEWER
ARV	– AIR/VACUUM RELEASE VALVE	DIP	– DUCTILE IRON PIPE	G	– GAS	PRV	– PRESSURE RELIEF VALVE	SD	– STORM DRAIN
B	– BASELINE	DU	– DEFLECT UP	HP	– HIGH PRESSURE	PT	– POINT OF TANGENCY	TC	– TOP OF CURB
BC	– BEGIN CURVE	E	– EXISTING	I	– INSTALL	PUE	– PUBLIC UTILITY EASEMENT	T	– TELEPHONE
BCT	– BEGIN CROWN TRANSITION	EC	– END CURVE	LP	– LIGHT POLE	R/REL	– REMOVE & RELOCATE	TP	– TOP OF PIPE
C	– CONSTRUCT	ECT	– END CROWN TRANSITION	LT	– LEFT	R/RPLC	– REMOVE & REPLACE	TW	– TOP WIDTH
CAV	– COMBINATION AIR VALVE	ELEV	– ELEVATION	MH	– MANHOLE	PVC	– POLY VINYL CHLORIDE	UE	– UNDERGROUND ELECTRIC
CCP	– CONCRETE CYLINDER PIPE	F-F	– FACE TO FACE	PC	– POINT OF CURVATURE	R	– REMOVE	VCP	– VITRIFIED CLAY PIPE
CI	– CAST IRON	F/F	– FEET/FOOT	PCC	– POINT OF COMPOUND CURVATURE	REL	– RELOCATE	VER	– VERIFY LOCATION
CL	– CENTERLINE	FH	– FIRE HYDRANT	POC	– POINT ON CURVE	ROW	– RIGHT-OF-WAY	W OR WL	– WATERLINE
COA	– CITY OF ALBUQUERQUE	FL	– FLOW LINE	PP	– POWER POLE	RT	– RIGHT	X	– CROSSING

AMAFCA
APPROVED FOR CONSTRUCTION
11/21/96
LARRY A. BLAIR
EXECUTIVE ENGINEER

EASTERLING & ASSOCIATES, INC.
CONSULTING ENGINEERS
10131 Coors Rd., NW, Suite H-7/8
ALBUQUERQUE, NEW MEXICO 87114
(505) 898-8021 FAX (505) 898-8501

APPROVED FOR CONSTRUCTION
11/21/96
CITY HYDROLOGY — DATE

PROJECT NUMBER 3324.0

SHEET 1 OF 25

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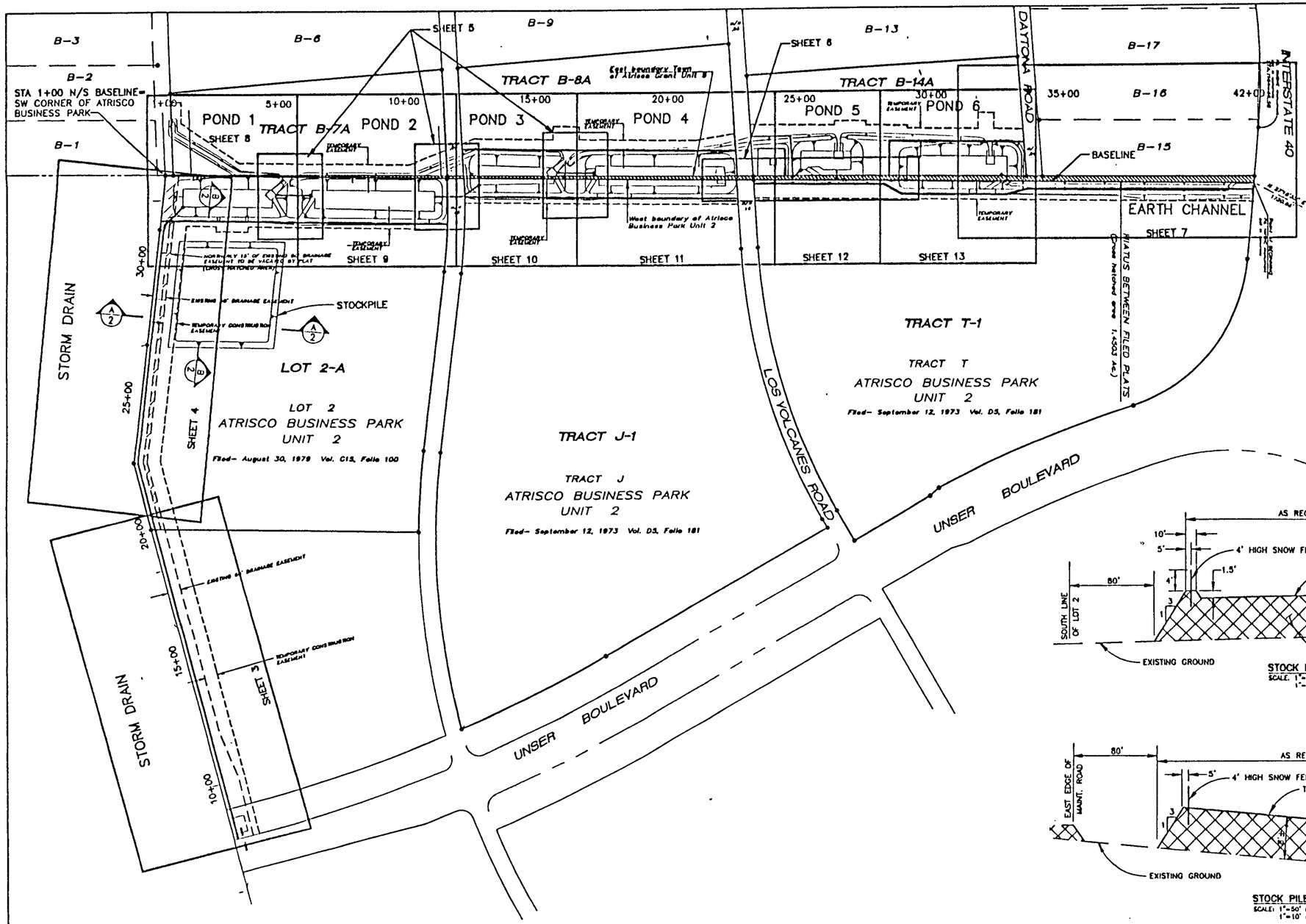
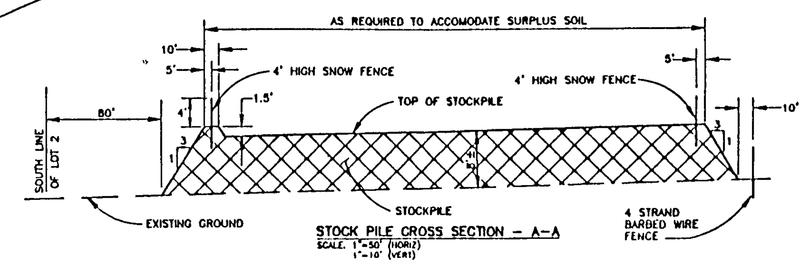


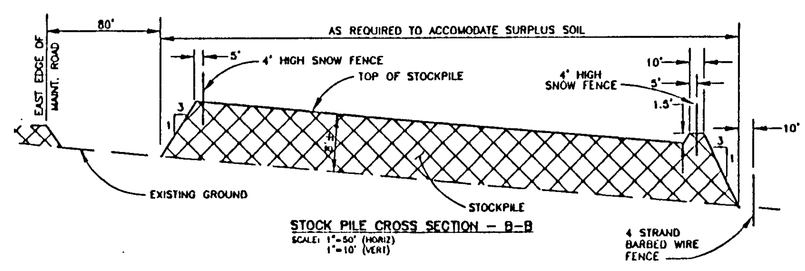
(IN FEET)
1 inch = 200 ft.

SOIL STOCKPILE NOTES

1. LENGTH AND WIDTH OF THE COMPLETED STOCKPILE SHALL NOT DIFFER BY MORE THAN 15%.
2. AFTER ALL MATERIAL HAS BEEN PLACED, THE SURFACE OF THE STOCKPILE SHOULD BE BLADED SMOOTH THEN WATERED THOROUGHLY TO PROMOTE CRUSTING.
3. STOCKPILE SIDE SLOPES SHALL BE 3:1.
4. DURING CONSTRUCTION AND UPON COMPLETION, AT LEAST ONE 12' WIDE RAMP SLOPED AT LESS THAN 7-1/2% SHALL BE PROVIDED TO ALLOW WATER TRUCK ACCESS TO THE TOP OF THE STOCKPILE.
5. THE TOP SURFACE OF THE FINISHED STOCKPILE SHOULD BE FIRM ENOUGH TO ALLOW WATER TRUCK ACCESS.
6. 4' HIGH SNOW FENCE SHALL BE CONSTRUCTED AROUND THE PERIMETER OF THE TOP OF THE FINISHED STOCKPILE. A BREAK IN THE FENCE SHALL BE PROVIDED TO ALLOW WATER TRUCK ACCESS AT THE ACCESS RAMP.
7. 4 STRAND BARBED WIRE FENCE, PER DETAILS ON SHEET 19, SHALL BE CONSTRUCTED ADJACENT TO THE NORTH AND EAST TOE OF THE STOCKPILE. THE FENCE SHOULD EXTEND AND CONNECT TO THE NORTH/SOUTH FENCE TO BE CONSTRUCTED ADJACENT TO THE EAST EDGE OF POND 1, AND THE EXISTING EAST/WEST FENCE LOCATED SOUTH OF THE STOCKPILE.



STOCK PILE CROSS SECTION – A–A
SCALE: 1"=50' (HORIZ)
1"=10' (VERT)



STOCK PILE CROSS SECTION – B–B
SCALE: 1"=50' (HORIZ)
1"=10' (VERT)

UTILITY COMPANY CONTACTS

CITY OF ALBUQUERQUE
(Water & Sanitary Sewer)
Bill Otte
PWD/UUWy Development
P.O. Box 1293
Albuquerque, NM 87103
(505) 768-2718

PNM ELECTRIC
Jim Von
4201 Edith Blvd. NE
Albuquerque, New Mexico 87107
(505) 848-3426

PNM GAS
Debbie O'Callaghan
4625 Edith Blvd., NE
Albuquerque, New Mexico 87107
(505) 761-7705

US WEST COMMUNICATIONS
Norma Carrillo
201 Third Street
P.O. Box 1355, Sta. 852
Albuquerque, New Mexico 87103
(505) 245-8708

AT&T
Ishmael Pantoja
111 Third St., NW
Albuquerque, New Mexico 87103
(505) 842-2806

JONES INTERCABLE
Karen Shore
4811 Montbel Pl., NE
P.O. Box 27138
Albuquerque, NM 87125-7138
(505) 761-6220

RECORD DRAWING
I, Charles M. Easterling, hereby certify that these drawings have been revised in accordance with the information furnished by Surv-Tek, Inc. to reflect the construction as actually accomplished

Charles M. Easterling, P.E. — Date 5-8-97
N.M.P.E. No. 6411

EASTERLING & ASSOCIATES, INC.
CONSULTING ENGINEERS
10131 Coors Rd., NW, Suite H-7/8
ALBUQUERQUE, NEW MEXICO 87114
(505) 898-8021 FAX (505) 898-8501

ALBUQUERQUE METROPOLITAN ARROYO FLOOD CONTROL AUTHORITY

TITLE: UNSER DIVERSION
KEY MAP, UTILITY CONTACTS AND STOCKPILE SECTIONS

APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
AMAFCA					

PROJECT NO. 3324.0 | MAP NO. Z-K9 | SHEET 2 OF 25

AS BUILT INFORMATION
CONTRACTOR — DATE
WORK STAKED BY — DATE
AS-BUILTS MARKED BY — DATE
FIELD VERIFICATION BY — DATE
DRAWINGS CORRECTED BY — DATE
MICRO-FILM INFORMATION
RECORDED BY — DATE
NO.

BENCH MARKS
STATION NAME: 1-40-20A
N.M.S.H.C. BRASS TABLET LOCATED ON THE NORTH SIDE OF U.S. HWY. 1-40 AND ABOUT 425' EAST OF UNSER BLVD. OVERPASS
NORTHING: 1,490,199.7
EASTING: 365,926.18
ELEVATION: 5165.89

SURVEY INFORMATION
FIELD NOTES

NO.	BY	DATE
TOPO	GEO SERVICE	4-93

ENGINEER'S SEAL
NEW MEXICO PROFESSIONAL ENGINEER 6411
5-12-97

NO.	DATE	REMARKS	BY

REVISIONS

		DATE
DESIGNED BY	VSF,JML	10/93
DRAWN BY	PMT,JMM	10/93
CHECKED BY	VSF,CME	9/94

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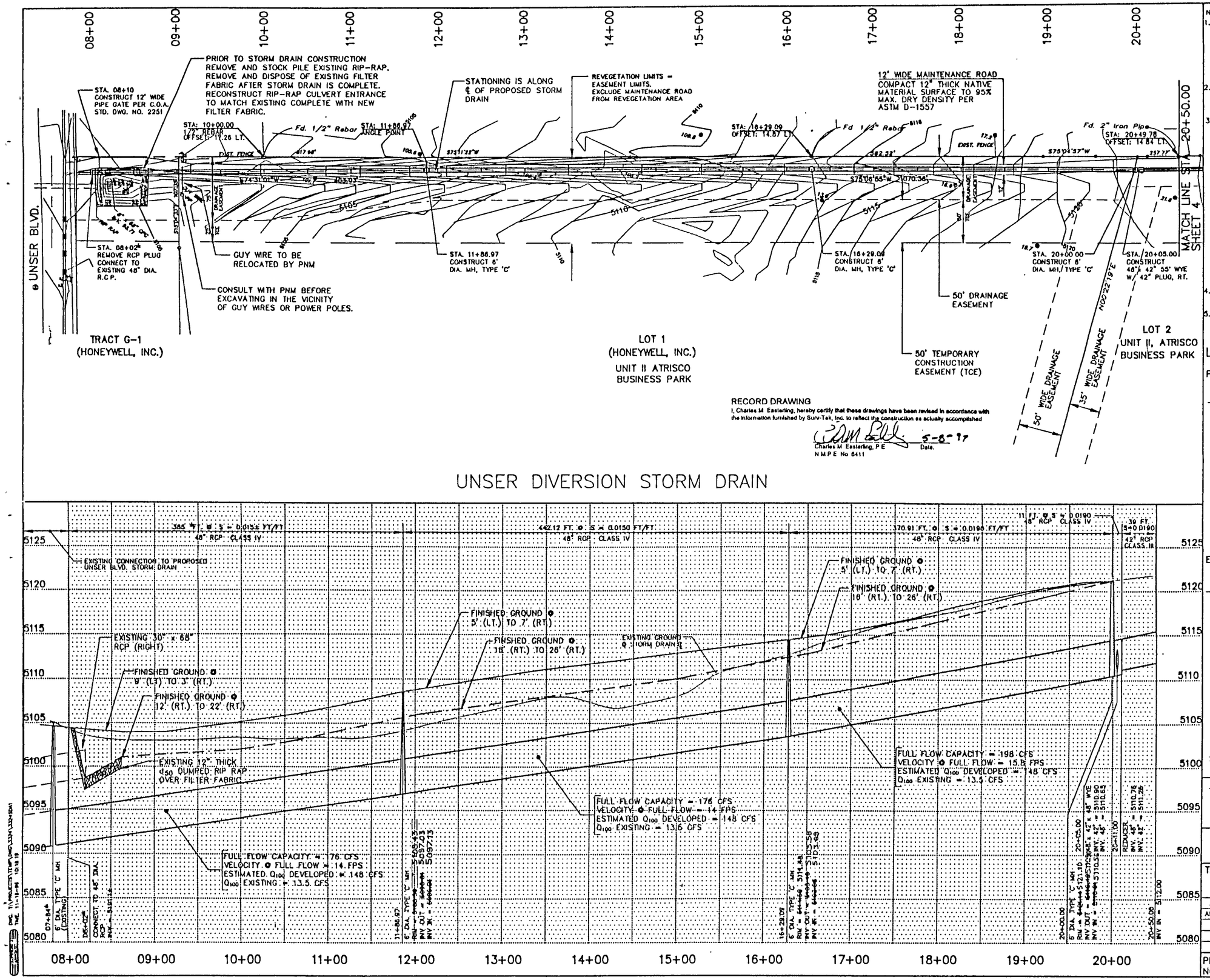

NOTES:

1. THE CONTRACTOR WILL BE REQUIRED TO CONFINE HIS WORK TO THE EASEMENT LIMITS AND PUBLIC RIGHT-OF-WAY. THE CONTRACTOR SHALL NOT DISTURB THE FENCE LOCATED ALONG PORTIONS OF THE SOUTH LINE OF THE DRAINAGE EASEMENT.
2. REINFORCED CONCRETE PIPE WYES, REDUCERS AND PLUGS SHALL BE FACTORY FABRICATED.
3. THE MINIMUM BEDDING CLASS FOR ALL STORM DRAIN CONSTRUCTION SHALL BE CLASS "B". NATIVE MATERIALS CONFORMING TO THE CRITERIA FOR CLASS II OR CLASS III SOILS SHALL BE USED TO CONSTRUCT THE REQUIRED GRANULAR FOUNDATION. BEDDING FOR STORM DRAIN 50 LF IMMEDIATELY DOWNSTREAM OF EACH POND OUTLET STRUCTURE SHALL BE "LEAN FILL". THE "LEAN FILL" SHALL BE PLACED IN THE ZONE BETWEEN THE INVERT AND THE SPRING LINE OF THE PIPE IN ACCORDANCE WITH SECTION 207 OF THE CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, 1988 EDITION AS AMENDED THROUGH UPDATE NO.5. FOUNDATION AND BACKFILL MATERIAL SHALL BE COMPACTED TO A MINIMUM DENSITY OF 90% MAXIMUM DRY DENSITY PER ASTM D-1557.
4. COMPACT EARTHEN FILL TO 95% MAX. DRY DENSITY PER ASTM D-1557.
5. STATIONING IS BASED ON THE CENTERLINE OF THE STORM DRAIN.

LEGEND

PROPOSED FEATURES

439 SPOT ELEVATION

5135 CONTOUR

EXISTING FEATURES

49.8 SPOT ELEVATION

5150 CONTOUR

SCALE: 1"=50' HORIZ.
1"= 5' VERT.

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CONSULTING ENGINEERS
10131 Coors Rd., NW, Suite H-7/8
ALBUQUERQUE, NEW MEXICO 87114
(505) 898-8021 FAX (505) 898-8501

AS BUILT INFORMATION
CONTRACTOR
WORK STAKED BY | DATE
INSPECTED BY | DATE
FIELD VERIFICATION BY | DATE
DRAWINGS CORRECTED BY | DATE
MICRO-FILM INFORMATION
RECORDED BY | DATE
NO.

BENCH MARKS
STATION NAME: I-40-20A
N.M.S.H.C. BRASS TABLET LOCATED ON THE NORTH SIDE OF U.S. HWY. I-40 AND ABOUT 465' EAST OF UNSER BLVD. OVERPASS
NORTHING: 1,490,199.97
EASTING: 356,926.16
ELEVATION: 5165.89

SURVEY INFORMATION
FIELD NOTES

NO.	BY	DATE
TOPO	GEO SERVICE	4-93

ENGINEERS SEAL

NO.	DATE	REMARKS	BY
		REVISIONS	

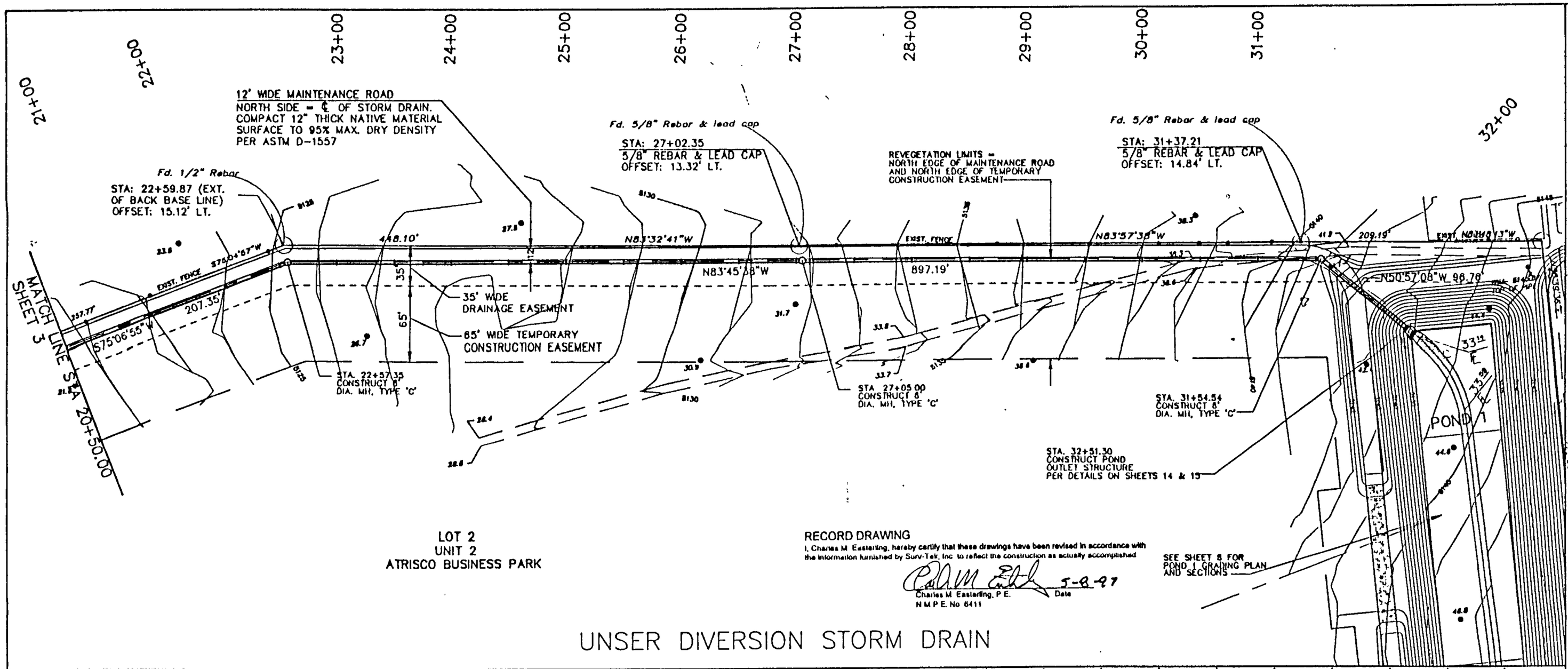
DESIGNED BY VSF/JML DATE 10/93
DRAWN BY JML/MN DATE 10/93
CHECKED BY VSF/CME DATE 9/94

ALBUQUERQUE METROPOLITON ARROYO FLOOD CONTROL AUTHORITY

TITLE: UNSER DIVERSION
STORM DRAIN - PLAN AND PROFILE
STA. 7+83.94 to STA. 20+50.00

APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
AMAFCA					

PROJECT NO. 3324.0 | MAP Z-K9/ NO. Z-K10 | SHEET 3 OF 25



NOTES:

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2. REINFORCED CONCRETE PIPE WYES, REDUCERS AND PLUGS SHALL BE FACTORY FABRICATED.
3. THE MINIMUM BEDDING CLASS FOR ALL STORM DRAIN CONSTRUCTION SHALL BE CLASS "B". NATIVE MATERIALS CONFORMING TO THE CRITERIA FOR CLASS II OR CLASS III SOILS SHALL BE USED TO CONSTRUCT THE REQUIRED GRANULAR FOUNDATION. BEDDING FOR STORM DRAIN 50 LF IMMEDIATELY DOWNSTREAM OF EACH POND OUTLET STRUCTURE SHALL BE "LEAN FILL". THE "LEAN FILL" SHALL BE PLACED IN THE ZONE BETWEEN THE INVERT AND THE SPRING LINE OF THE PIPE IN ACCORDANCE WITH SECTION 207 OF THE CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, 1986 EDITION AS AMENDED THROUGH UPDATE NO.5. FOUNDATION AND BACKFILL MATERIAL SHALL BE COMPACTED TO A MINIMUM DENSITY OF 90% MAXIMUM DRY DENSITY PER ASTM D-1557.
4. STATIONING IS BASED ON THE CENTERLINE OF THE STORM DRAIN.

LEGEND

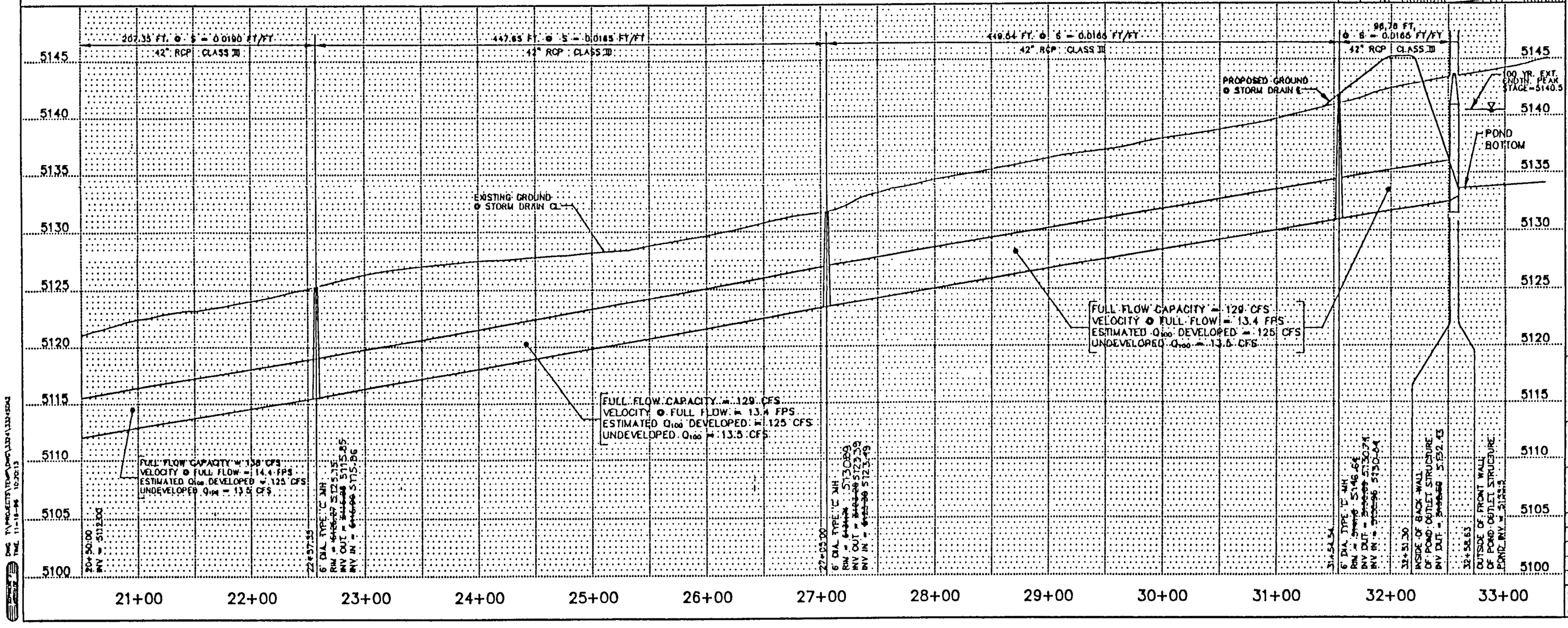
PROPOSED FEATURES

- 43.9 ⊕ SPOT ELEVATION
- 5135 CONTOUR
- SOIL CEMENT PAVING
- REINFORCED CONCRETE PAVING
- POND OUTLET STRUCTURE

EXISTING FEATURES

- ⊕49.8 SPOT ELEVATION
- 5150 CONTOUR

SCALE: 1"=50' HORIZ.
1"= 5' VERT.



AS BUILT INFORMATION
CONTRACTOR
WORK STAKED BY | DATE
AS-BUILTS PREPARED BY | DATE
FIELD VERIFICATION BY | DATE
DRAWINGS CORRECTED BY | DATE

MICRO-FILM INFORMATION
RECORDED BY | DATE
NO.

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NORTHING: 1,490,199.97
EASTING: 365,926.16
ELEVATION: 5165.89

SURVEY INFORMATION
FIELD NOTES

NO.	BY	DATE
TOPO	GEO SERVICE	4-93

ENGINEERS SEAL
REGISTERED PROFESSIONAL ENGINEER
6-12-11

NO.	DATE	REMARKS	BY
		REVISIONS	

DESIGN

		DATE
DESIGNED BY	VSF, JAL	10/93
DRAWN BY	JAL, PMT, MM	10/93
CHECKED BY	VSF, CME	9/94

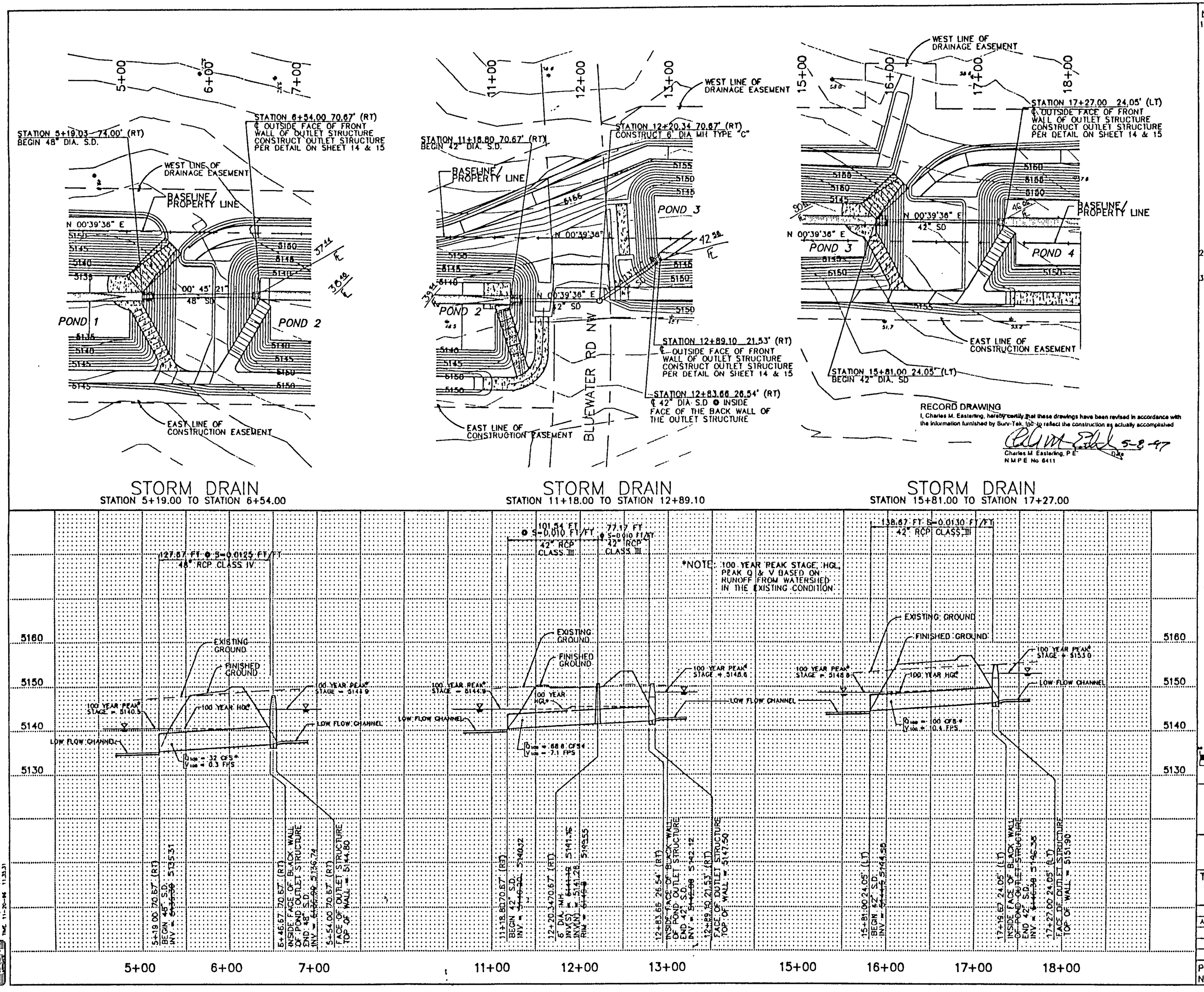
EASTERLING & ASSOCIATES, INC.
CONSULTING ENGINEERS
10131 Coors Rd., NW, Suite H-7/8
ALBUQUERQUE, NEW MEXICO 87114
(505) 898-8021 FAX (505) 898-8501

ALBUQUERQUE METROPOLITON
ARROYO FLOOD CONTROL
AUTHORITY

TITLE: UNSER DIVERSION
STORM DRAIN - PLAN AND PROFILE
STA. 20+50.00 to STA. 32+51.30

APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
AMAFCA					

PROJECT NO. 3324.0 | MAP NO. Z-K9 | SHEET 4 OF 25



NOTES

1. THE MINIMUM BEDDING CLASS FOR ALL STORM DRAIN CONSTRUCTION SHALL BE CLASS "B". NATIVE MATERIALS CONFORMING TO THE CRITERIA FOR CLASS II OR CLASS III SOILS SHALL BE USED TO CONSTRUCT THE REQUIRED GRANULAR FOUNDATION. WITHIN THE 50 LF REACH IMEDIATELY DOWNSTREAM FROM EACH POND OUTLET THE BEDDING MATERIAL PLACED IN THE ZONE BETWEEN THE INVERT AND THE HAUNCH OF THE PIPE SHALL BE "LEAN FILL" CONFORMING TO THE REQUIREMENTS OF SECTION 207 OF THE CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, 1986 EDITION AS AMMENDED THROUGH UPDATE No. 5. FOUNDATION AND BACKFILL MATERIAL SHALL BE COMPACTED TO A MINIMUM OF 90% MAXIMUM DRY DENSITY PER ASTM D-1557. EXCEPT FOR THE FOLLOWING REACH:
   STA. 5+19 - 6+46
   STA. 11+19 - 12+83
   STA. 15+81 - 17+19
   WHICH SHALL BE COMPACTED TO A MINIMUM OF 95% MAXIMUM DRY DENSITY PER ASTM D-1557.
2. SEE SHEETS 8 THRU 11 FOR PONDS 1 THRU 4 GRADING PLANS AND SECTIONS
3. STATIONING FOR THE STORM DRAIN IS BASED ON THE BASELINE/PROPERTY LINE. THIS LINE IS THE WEST LINE OF THE ATRISCO BUSINESS PARK

LEGEND

PROPOSED FEATURES

- 43.9 ⊕ SPOT ELEVATION
- —5135— CONTOUR
- SOIL CEMENT PAVING
- REINFORCED CONCRETE PAVING
- BASE COURSE SURFACE
- POND OUTLET STRUCTURE

EXISTING FEATURES

- ⊕ 49.8 SPOT ELEVATION
- —5150— CONTOUR

VERT. 1 inch = 10 ft.
HORIZ. 1 inch = 50 ft.

EASTERLING & ASSOCIATES, INC.
CONSULTING ENGINEERS
10131 Coors Rd., NW, Suite H-7/8
ALBUQUERQUE, NEW MEXICO 87114
(505) 898-8021 FAX (505) 898-8501

SURVEY INFORMATION — FIELD NOTES

NO.	BY	DATE
TOPO	GEO SERVICE	4-83

AS BUILT INFORMATION — CONTRACTOR

	DATE
WORK STARTED BY	
WORK ACCEPTANCE BY	
FIELD VERIFICATION BY	
DRAWINGS COMPLETED BY	

BENCH MARKS
STATION NAME: 1-40-20A
N.M.S.H.C. BRASS TABLET LOCATED ON THE NORTH SIDE OF U.S. HWY. I-40 ABOUT 465' EAST OF UNSER BLVD. OVERPASS
NORTHING: 1,490,199.97
EASTING: 356,926.16
ELEVATION: 5165.89

MICRO-FILM INFORMATION
RECORDED BY DATE
NO.

ENGINEERS SEAL

NO.	DATE	REMARKS	BY
		REVISIONS	

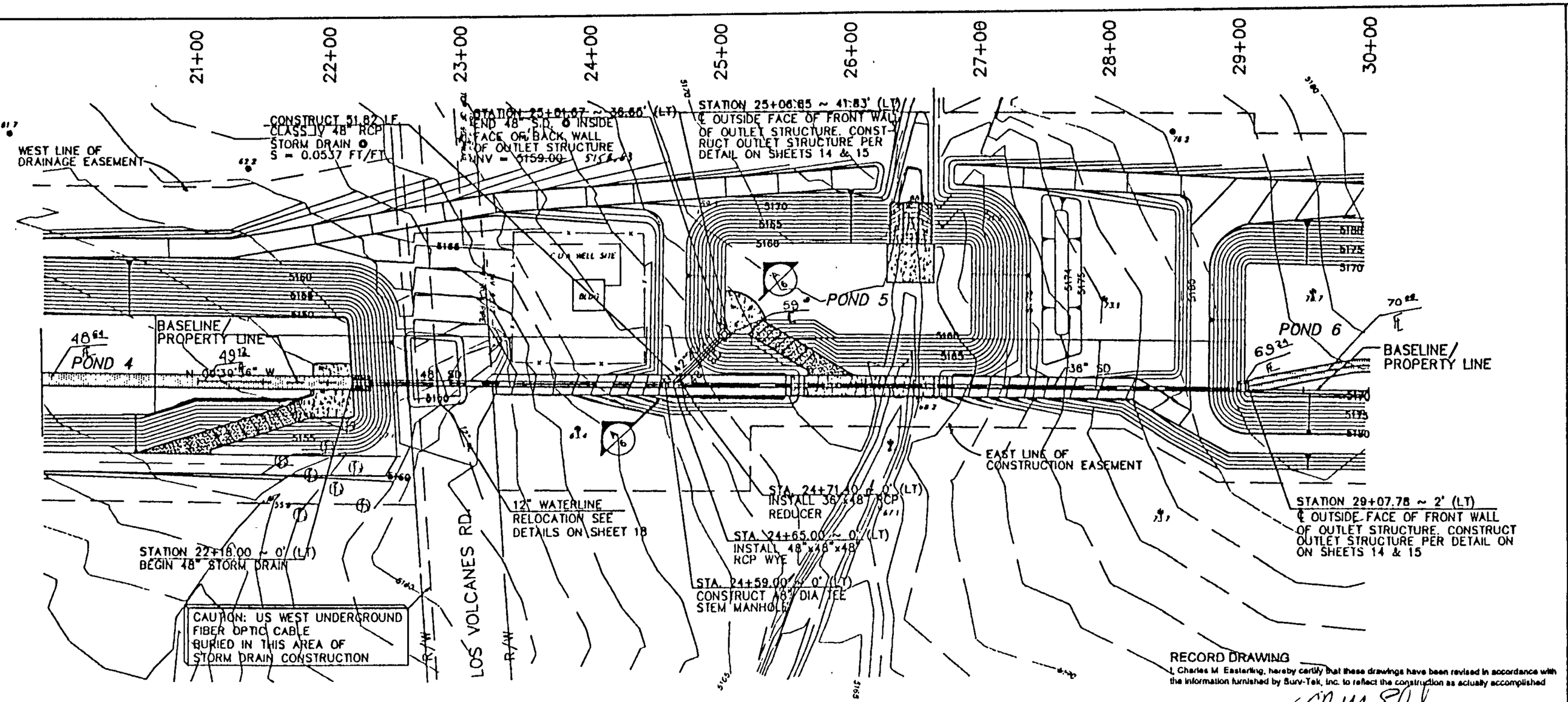
DESIGNED BY VSF DATE 10/93
DRAWN BY PMT/JAM DATE 10/93
CHECKED BY VSF/RPB DATE 9/94

ALBUQUERQUE METROPOLITON ARROYO FLOOD CONTROL AUTHORITY

TITLE: UNSER DIVERSION
STORM DRAIN - POND CONNECTIONS
PLAN AND PROFILE

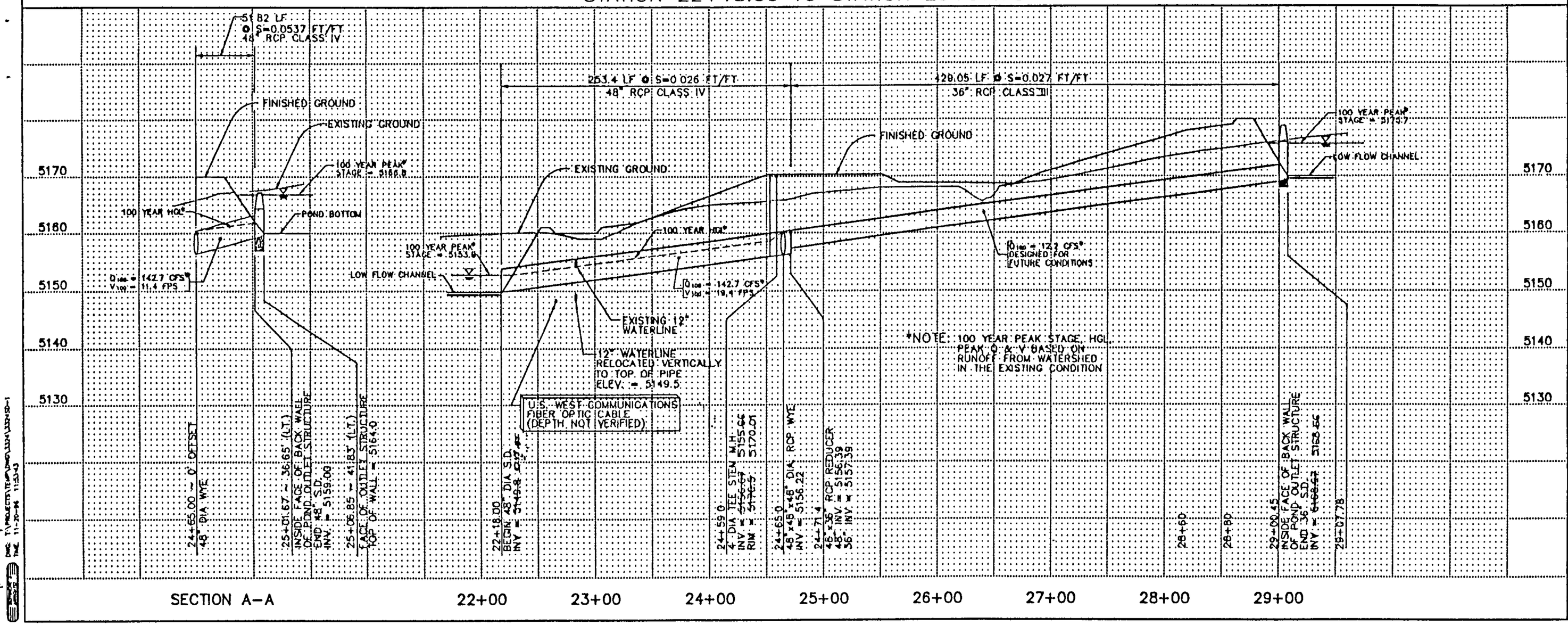
APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
AMAFCA					

PROJECT NO. 3324.0 | MAP NO. Z-J9 / Z-K9 | SHEET 5 OF 25



RECORD DRAWING
I, Charles M. Easterling, hereby certify that these drawings have been revised in accordance with the information furnished by Surv-Tek, Inc. to reflect the construction as actually accomplished
Charles M. Easterling, P.E. N.M.P.E. No. 6411 Date: 5-8-97

STORM DRAIN
STATION 22+18.00 TO STATION 29+07.78



SECTION A-A

NOTES

1. THE MINIMUM BEDDING CLASS FOR ALL STORM DRAIN CONSTRUCTION SHALL BE CLASS "B". NATIVE MATERIALS CONFORMING TO THE CRITERIA FOR CLASS II OR CLASS III SOILS SHALL BE USED TO CONSTRUCT THE REQUIRED GRANULAR FOUNDATION. WITHIN THE 50 LF REACH IMMEDIATELY DOWNSTREAM FROM EACH POND OUTLET, THE BEDDING MATERIAL PLACED IN THE ZONE BETWEEN THE INVERT AND THE HAUNCH OF THE PIPE SHALL BE "LEAN FILL" CONFORMING TO THE REQUIREMENTS OF SECTION 207 OF THE CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, 1986 EDITION AS AMMENDED THROUGH UPDATE NO. 5. FOUNDATION AND BACKFILL MATERIAL SHALL BE COMPACTED TO A MINIMUM DENSITY OF 90% MAXIMUM DRY DENSITY PER ASTM D-1557. EXCEPT FOR THE FOLLOWING REACH:
   STA. 28+00 - 29+00
   POND 5 OUTLET STAB
   WHICH SHALL BE COMPACTED TO A MINIMUM OF 95% MAXIMUM DRY DENSITY PER ASTM D-1557.
2. SEE SHEETS 11, 12, AND 13 FOR POND 4, 5, AND 6 GRADING PLAN AND SECTIONS
3. STATIONING FOR THE STORM DRAIN IS BASED ON THE BASELINE/PROPERTY LINE. THIS LINE IS THE WEST LINE OF ATRISCO BUSINESS PARK UNIT 2.

LEGEND

PROPOSED FEATURES
- SPOT ELEVATION
- 5135 CONTOUR
- SOIL CEMENT PAVING
- REINFORCED CONCRETE PAVING
- BASE COURSE SURFACE
- POND OUTLET STRUCTURE

EXISTING FEATURES
- SPOT ELEVATION
- 5150 CONTOUR
- FENCE

GRAPHIC SCALE - VERTICAL (IN FEET) 1 inch = 10 ft.

GRAPHIC SCALE - HORIZ (IN FEET) 1 inch = 60 ft.

EASTERLING & ASSOCIATES, INC.
CONSULTING ENGINEERS
10131 Coors Rd., NW, Suite H-7/8
ALBUQUERQUE, NEW MEXICO 87114
(505) 898-8021 FAX (505) 898-8501

SURVEY INFORMATION
FIELD NOTES

NO.	BY	DATE
TOPO	GEO SERVICE	04/93

BENCH MARKS
STATION NAME: 1-40-20A
N.M.S.H.C. BRASS TABLET LOCATED ON THE NORTH SIDE OF U.S. HWY. I-40 AND ABOUT 465' EAST OF UNSER BLVD. OVERPASS

AS BUILT INFORMATION
CONTRACTOR
WORK STAKED BY DATE
INSPECTOR'S ACCEPTANCE DATE
FIELD VERIFICATION BY DATE
DRAWINGS CORRECTED BY DATE
MICRO-FILM INFORMATION
RECORDED BY DATE
NO.
NORTHING: 1,490,199.87
EASTING: 356,926.16
ELEVATION: 5165.89

ENGINEER'S SEAL
REGISTERED PROFESSIONAL ENGINEER

NO.	DATE	REMARKS	BY
		REVISIONS	

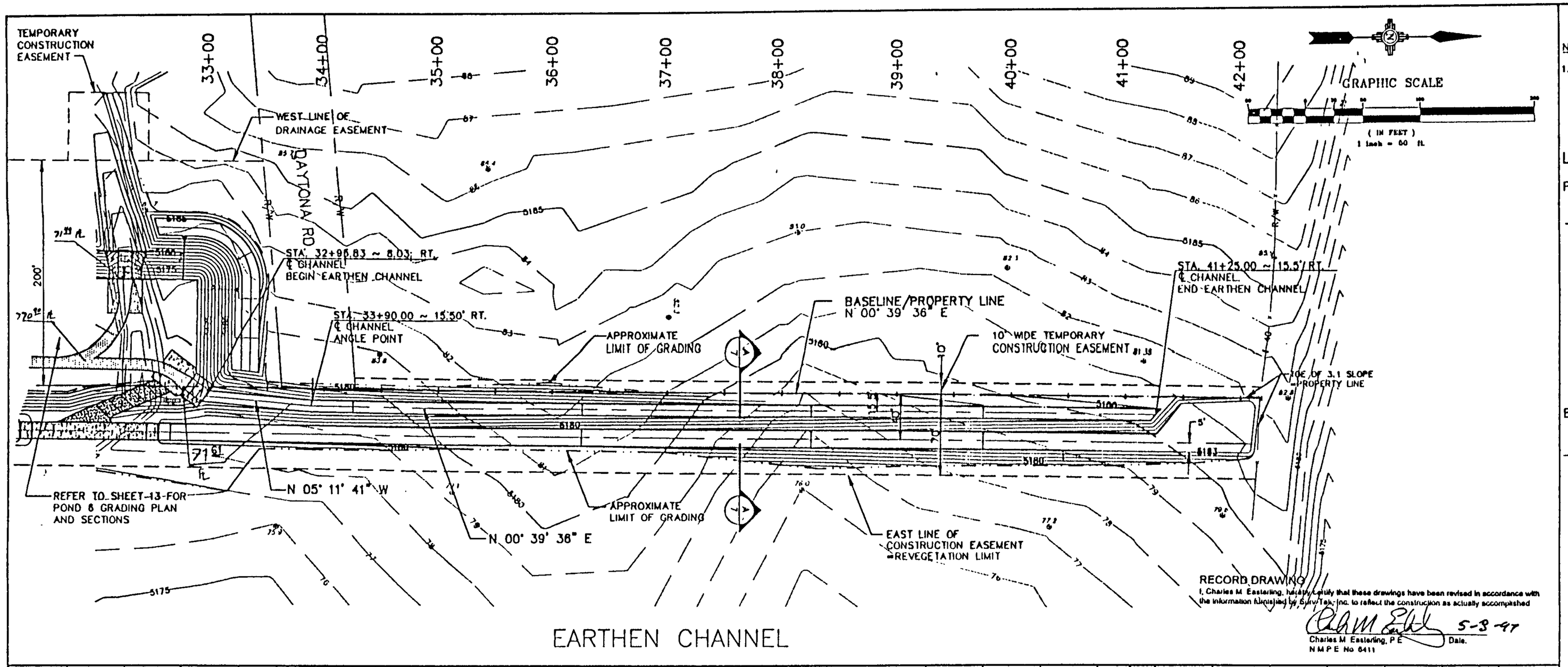
DESIGNED BY VSF DATE 10/93
DRAWN BY PWT,JAM DATE 10/93
CHECKED BY VSF,RPB DATE 9/94

ALBUQUERQUE METROPOLITAN ARROYO FLOOD CONTROL AUTHORITY

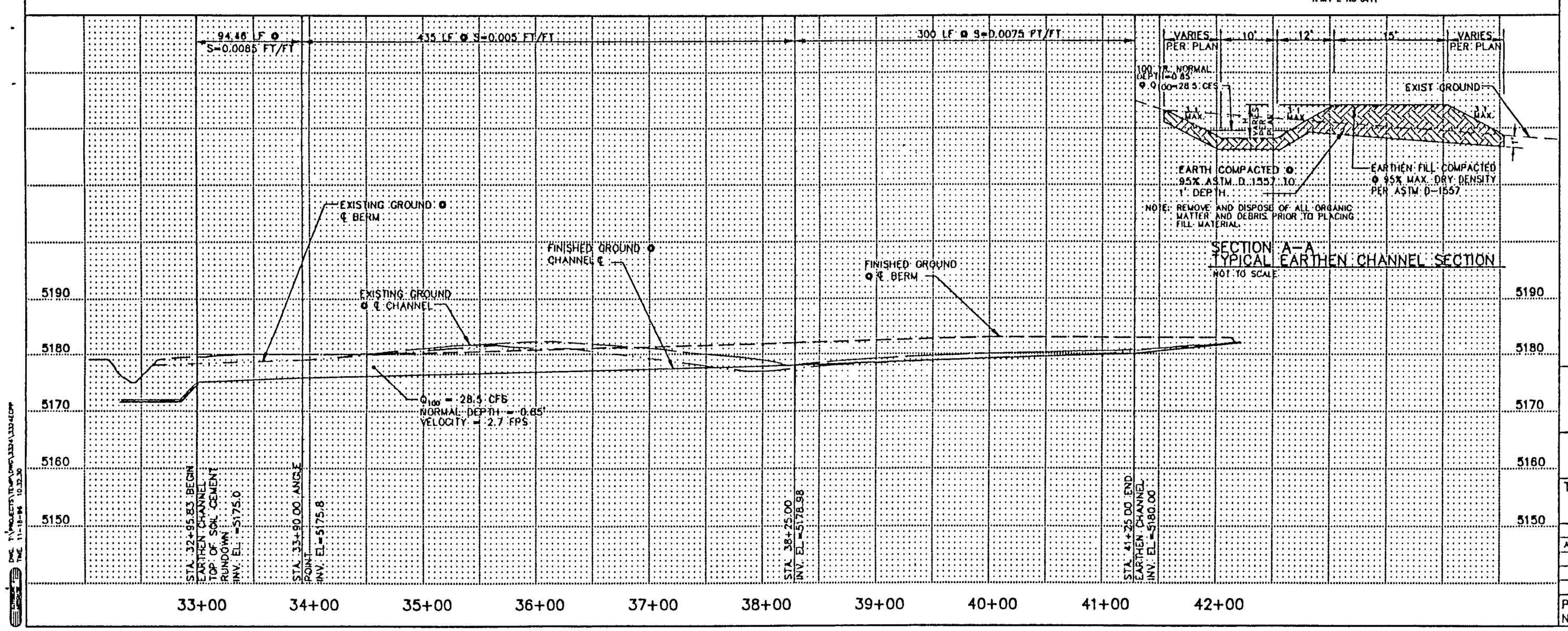
TITLE: UNSER DIVERSION
STORM DRAIN/POND CONNECTIONS
PLAN AND PROFILE

APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
AMAFCA			COA - HYD		

PROJECT NO. 3324.0 | MAP NO. Z-K9 | SHEET 6 OF 25



EARTHEN CHANNEL



NOTES:

1. STATIONING BASED ON BASELINE/PROPERTY LINE. THIS LINE IS THE WEST LINE OF THE ATRISCO BUSINESS PARK.

LEGEND

PROPOSED FEATURES

- 43.9 ⊕ SPOT ELEVATION
- 5135 CONTOUR
- SOIL CEMENT PAVING
- REINFORCED CONCRETE PAVING
- POND OUTLET STRUCTURE

EXISTING FEATURES

- ⊕ 49.8 SPOT ELEVATION
- 5150 CONTOUR

AS BUILT INFORMATION

CONTRACTOR | DATE
WORK STARTED BY | DATE
AS-BUILTS RECEIVED BY | DATE
FIELD VERIFICATION BY | DATE
DRAWINGS CORRECTED BY | DATE

MICRO-FILM INFORMATION

RECORDED BY | DATE
NO.

BENCH MARKS

STATION NAME: I-40-20A
N.M.S.H.C. BRASS TABLET LOCATED ON THE NORTH SIDE OF U.S. HWY. I-40 AND ABOUT 465' EAST OF UNSER BLVD. OVERPASS

NORTHING: 1,490,199.97
EASTING: 365,976.16
ELEVATION: 5165.69

SURVEY INFORMATION

FIELD NOTES

NO.	BY	DATE
TOPO	GEO SERVICE	04-93

ENGINEERS SEAL

NO.	DATE	REMARKS	BY

REVISIONS

DESIGNED BY	VSF	DATE 10/93
DRAWN BY	PMT/JMW	DATE 10/93
CHECKED BY	VSF/DME	DATE 9/94

SCALE: 1"=50' HORIZ.
1"=10' VERT.

EASTERLING & ASSOCIATES, INC.
CONSULTING ENGINEERS
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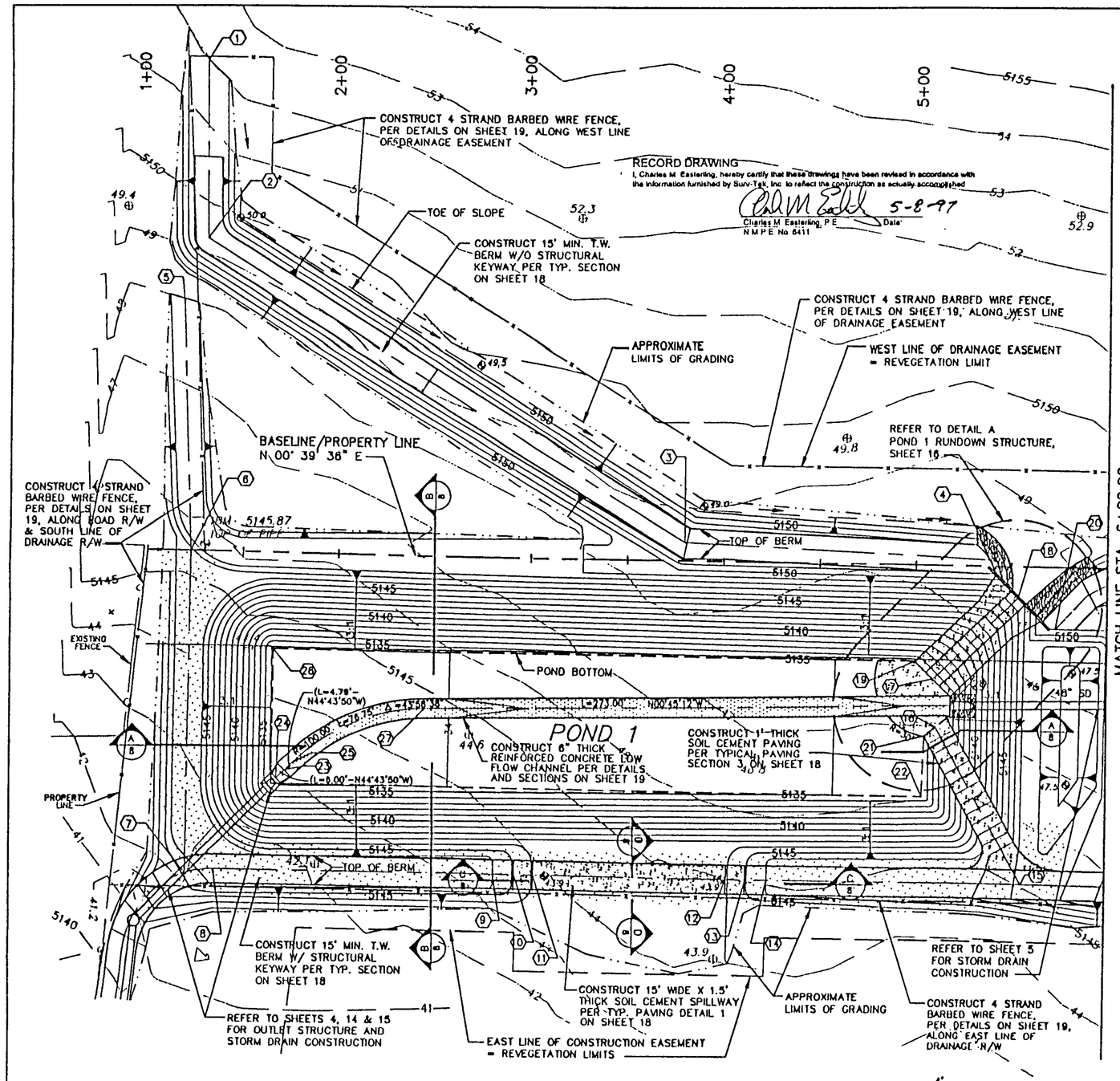
ALBUQUERQUE, NEW MEXICO 87114
(505) 898-8021 FAX (505) 898-8501

ALBUQUERQUE METROPOLITAN ARROYO FLOOD CONTROL AUTHORITY

TITLE: UNSER DIVERSION
EARTHEN CHANNEL

APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
AMAFCA					

PROJECT NO. 3324.0 | MAP NO. Z-K9 | SHEET 7 OF 25

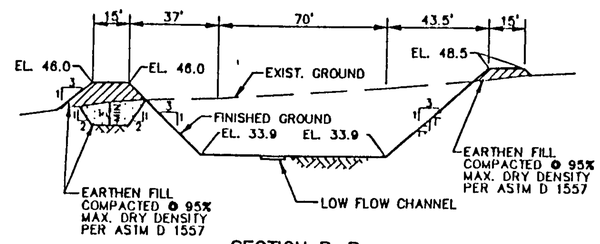


GRAPHIC SCALE

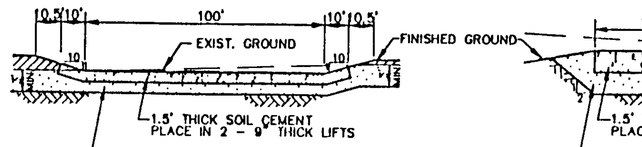
(IN FEET)
1 inch = 30 ft.

POND 1 POINT DATA

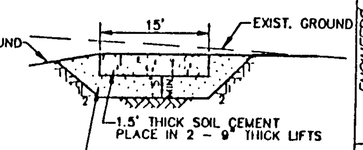
POINT I.D. NO.	STATION	OFFSET (FT)	ELEVATION	POINT DESCRIPTION
1	1+27.9	255.8' LT	5152.0	℄ BERM ⊙ DAYLIGHT
2	1+28.1	163.0' LT	5153.0	℄ BERM ⊙ ANGLE POINT
3	3+79.5	9.5' LT	5152.0	℄ BERM ⊙ ANGLE POINT
4	5+38.7	3.3' LT	5151.0	℄ BERM ⊙ END TOP OF SLOPE
5	1+16.6	130.7' LT	5148.0	℄ BERM ⊙ DAYLIGHT
6	1+22.5	0.0	5147.0	℄ BERM ⊙ BASE LINE, END STRUCTURAL KEY WAY
7	1+22.5	167.9' RT	5145.4	℄ E/W BERM ⊙ N/S BERM
8	1+37.5	165.5' RT	5148.0	℄ N/S BERM ⊙ P.C.
9	2+83.3	165.5' RT	5148.0	℄ N/S BERM ⊙ END TOP OF SLOPE
10	2+94.1	165.5' RT	5144.9	℄ SPILLWAY PAVING ⊙ S. EDGE OF PAVING
11	3+04.1	165.5' RT	5143.9	℄ SPILLWAY PAVING ⊙ TOE OF SLOPE
12	4+04.1	165.5' RT	5143.9	℄ SPILLWAY PAVING ⊙ TOE OF SLOPE
13	4+14.1	165.5' RT	5144.9	℄ SPILLWAY PAVING ⊙ N. EDGE OF PAVING
14	4+25.2	165.5' RT	5146.0	℄ N/S BERM ⊙ END TOP OF SLOPE
15	5+58.1	165.5' RT	5148.1	℄ N/S BERM ⊙ INT. W/ MAINT. RAMP
16	5+11.7	85.1' RT	5135.3	℄ MAINT. RAMP ⊙ GRADE BREAK
17	5+09.7	60.1' RT	5135.3	℄ INLET STRUCTURE ⊙ BOTTOM OF RUNDOWN
18	5+53.6	16.9' RT	5148.0	℄ INLET STRUCTURE ⊙ N.W. FACE OF CUTOFF WALL
19	5+00.5	51.0' RT	5135.3	W. EDGE OF POND BOTTOM ⊙ EDGE OF SOIL CEMENT PAVING
20	5+73.3	32.9' RT	5151.0	℄ BERM ⊙ END TOP OF SLOPE
21	5+05.8	89.9' RT	5435.3	N. EDGE OF POND BOTTOM ⊙ EDGE OF SOIL CEMENT PAVING
22	5+05.2	121.0' RT	5135.3	N.E. CORNER OF POND BOTTOM
23	1+74.02	113.88' RT	5133.30	℄ LOW FLOW CHANNEL ⊙ END OF TRANSITION
24	1+69.8	118.2' RT	5133.00	℄ LOW FLOW CHANNEL ⊙ FACE OF OUTLET STRUCTURE
25	1+77.39	110.47 RT	5133.32	℄ LOW FLOW CHANNEL ⊙ B.C.
26	1+67.0	51.0' RT	5133.7	S.W. CORNER OF POND BOTTOM
27	2+46.11	80.73' RT	5433.71	℄ LOW FLOW CHANNEL ⊙ E.C.
28	5+19.03	74.00' RT	5435.10	℄ LOW FLOW CHANNEL ⊙ END OF OF STORM DRAIN



SECTION B–B
SCALE: 1" = 30' HORIZ. 1" = 10' VERT.



SECTION C–C
1" = 10' VERT. SCALE: 1" = 30' HORIZ.



SECTION D–D
SCALE: 1" = 10' HORIZ. 1" = 5' VERT.

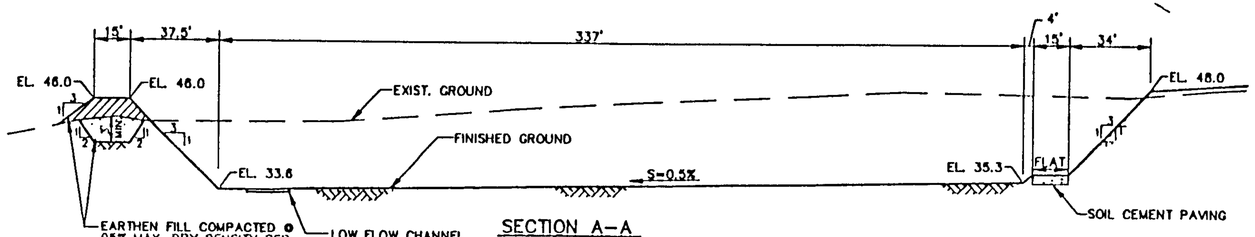
LEGEND

PROPOSED FEATURES

- 43.9 ⊕ SPOT ELEVATION
- —5135— CONTOUR
- RIPRAP
- SOIL CEMENT PAVING
- AREA TO BE OVEREXCAVATED FOR BERM STRUCTURAL KEYWAY
- REINFORCED CONCRETE PAVING
- COMPACTED EARTHEN FILL
- BASE COURSE SURFACE
- POND OUTLET STRUCTURE
- PIPE GATE (BY OTHERS)
- —x—x—x— BARBED WIRE FENCE

EXISTING FEATURES

- 49.8 SPOT ELEVATION
- —5150— CONTOUR



SECTION A–A
SCALE: 1" = 30' HORIZ. 1" = 10' VERT.

AS BUILT INFORMATION
CONTRACTOR
WORK STAKED BY — DATE
INSPECTOR — DATE
ACCEPTANCE BY — DATE
FIELD VERIFICATION BY — DATE
DRAWINGS CORRECTED BY — DATE
MICRO-FILM INFORMATION
RECORDED BY — DATE
NO.

BENCH MARKS
STATION NAME: I-40-20A
N.M.S.H.C. BRASS TABLET LOCATED ON THE NORTH SIDE OF U.S. HWY. I-40 AND ABOUT 465' EAST OF UNSER BLVD. OVERPASS
NORTHING: 1,490,199.97
EASTING: 356,926.16
ELEVATION: 5165.89

SURVEY INFORMATION
FIELD NOTES

NO.	BY	DATE
TOPO	GEO SERVICE	04-93

ENGINEER'S SEAL
NEW MEXICO REGISTERED PROFESSIONAL ENGINEER CHARLES M. EASTERLING 6411
9-12-11

NO.	DATE	REMARKS	BY
		REVISIONS	

DESIGNED BY VSF — DATE 10/93
DRAWN BY PMT/JMN — DATE 10/93
CHECKED BY VSF/CME — DATE 9/94

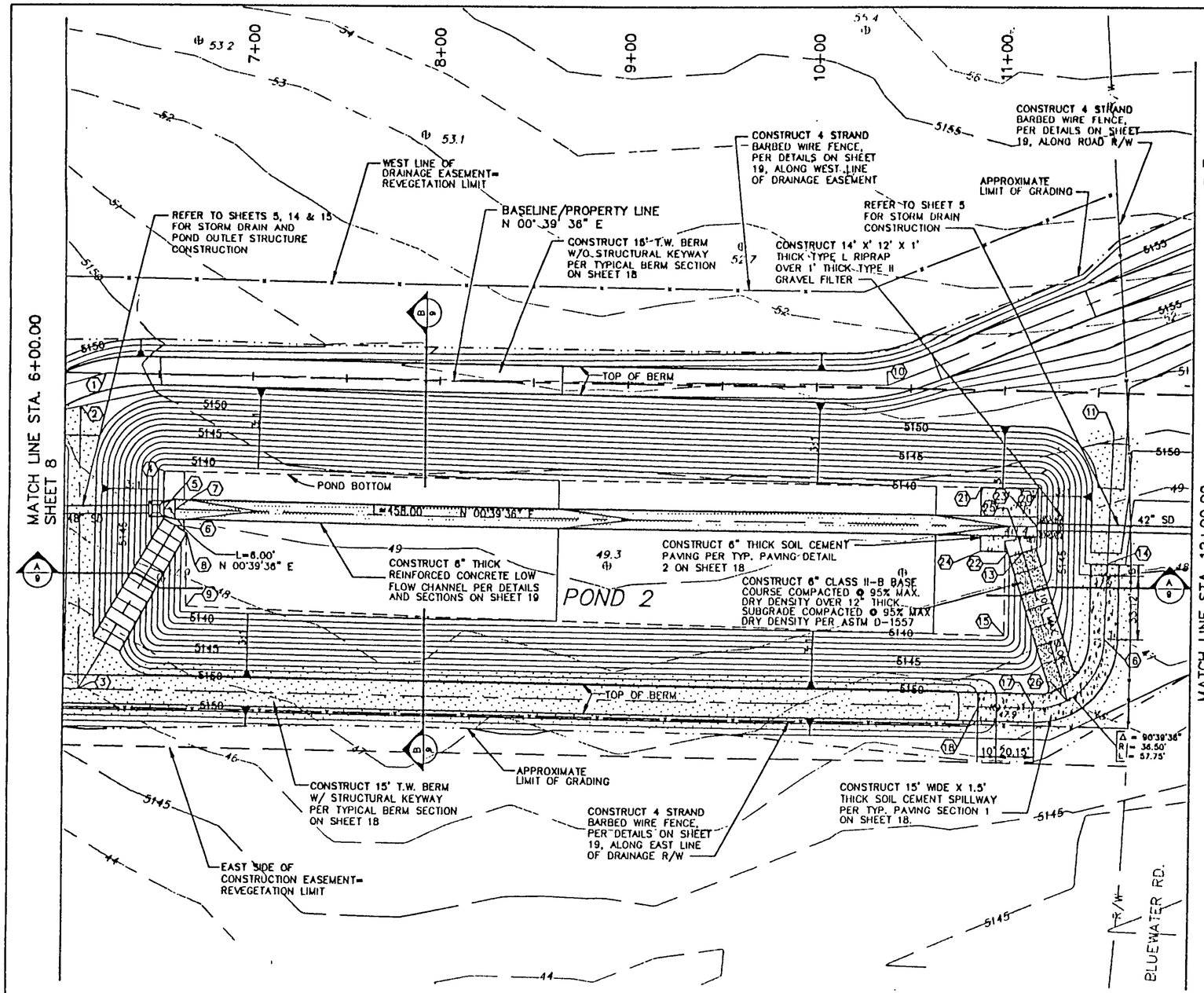
EASTERLING & ASSOCIATES, INC.
CONSULTING ENGINEERS
10131 Coors Rd., NW, Suite H-7/8
ALBUQUERQUE, NEW MEXICO 87114
(505) 898-8021 FAX (505) 898-8501

ALBUQUERQUE METROPOLITAN ARROYO FLOOD CONTROL AUTHORITY

TITLE: UNSER DIVERSION
POND 1
GRADING PLAN AND SECTIONS

APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
AMAFCA					

PROJECT NO. 3324.0 | MAP NO. Z-K9 | SHEET 8 OF 25

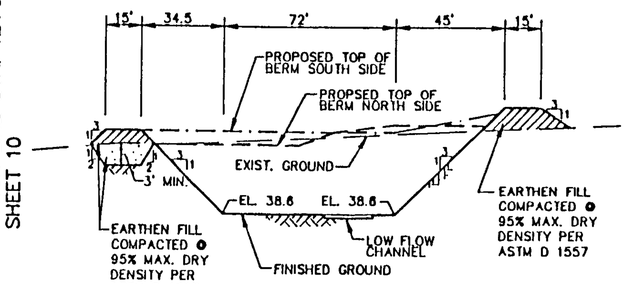


GRAPHIC SCALE

(IN FEET)
1 inch = 30 ft.

POND 2 POINT DATA

POINT I.D. NO.	STA.	OFFSET (FT)	ELEV.	POINT DESCRIPTION
1	6+21.5	0.0	5152.5	P.I. OF BERM
2	6+08.4	17.7' RT	5152.0	℄ OF BERM, END OF STRUCTURAL KEY WAY
3	6+10.2	165.5' RT	5150.1	P.I. OF BERMS AND MAINT. RAMP
4	6+54.0	51.0' RT	5138.0	S.W. CORNER OF POND BOTTOM
5	6+54.0	70.67' RT	5137.40	℄ LOW FLOW CHANNEL @ FACE OF OUTLET
6	6+60.23	78.9' RT	5138.0	℄ MAINT. RAMP @ END OF RAMP
7	6+60.00	70.67' RT	5137.70	℄ LOW FLOW CHANNEL @ END OF TRANSITION
8	6+66.2	82.7' RT	5138.0	SOUTH EDGE OF POND BOTTOM @ EDGE OF MAINTENANCE RAMP
9	6+66.0	121.1' RT	5138.1	S.E. CORNER OF POND BOTTOM
10	10+37.6	1.4' LT	5154.8	P.I. ℄ OF BERM
11	11+58.3	20.3' RT	5151.3	℄ OF BERM, END OF STRUCTURAL KEY WAY
12	NOT USED			
13	11+11.3	84.1' RT	5141.0	℄ MAINTENANCE RAMP @ EDGE OF SOIL CEMENT PAVING
14	11+55.2	89.4' RT	5149.0	℄ OF SPILLWAY PAVING & BERM @ EDGE OF PAVING
15	11+02.3	128.0' RT	5140.3	N.E. CORNER OF POND BOTTOM
16	11+55.6	128.6' RT	5147.9	℄ OF SPILLWAY PAVING @ P.T.
17	11+19.1	165.5' RT	5147.9	℄ OF SPILLWAY PAVING @ P.T.
18	10+89.1	165.5' RT	5149.0	℄ OF SPILLWAY PAVING & BERM @ EDGE OF PAVING
19	NOT USED			
20	11+18.8	51.0' RT	5140.3	N.W CORNER OF POND BOTTOM/SOIL CEMENT PAVING
21	10+88.7	51.0' RT	5140.2	W. EDGE OF POND BOTTOM @ S. EDGE OF SOIL CEM. PAV.
22	11+03.3	78.6' RT	5140.2	N. EDGE OF POND BOTTOM @ E. EDGE OF SOIL CEM. PAV.
23	11+18.80	70.67' RT	5140.05	℄ LOW FLOW CHANNEL @ END OF STORM DRAIN
24	10+88.76	83.7' RT	5140.2	S.E. CORNER OF SOIL CEMENT PAVING
25	11+09.0	77.2' RT	5140.3	℄ OF MAINT. RAMP @ END OF RAMP
26	11+36.9	160.9' RT	5147.9	℄ OF MAINT. RAMP @ ℄ OF SPILLWAY PAVING



SECTION B-B

SCALE: 1" = 30' HORIZ.
1" = 10' VERT.

RECORD DRAWING

I, Charles M. Easterling, hereby certify that these drawings have been revised in accordance with the information furnished by Surv-Tek, Inc. to reflect the construction as actually accomplished

Charles M Easterling, P.E. 5-8-97
N.M.P.E. No. 6411 Date

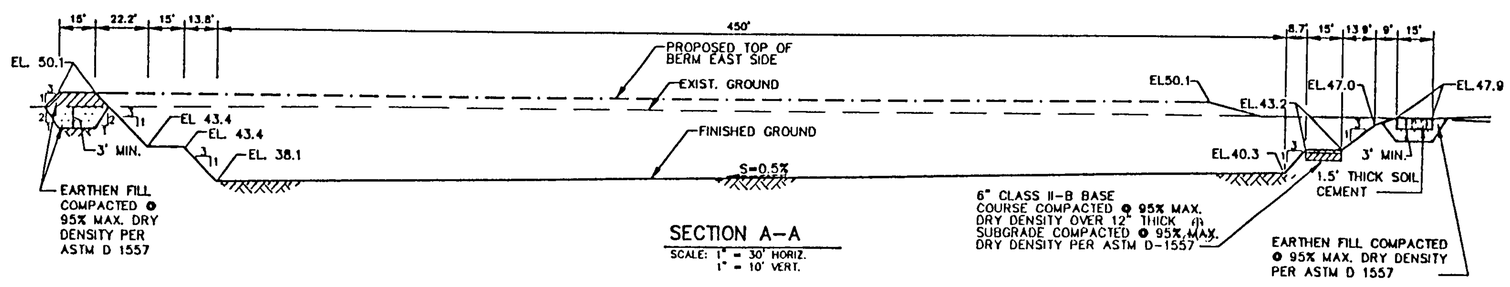
LEGEND

PROPOSED FEATURES

- 43.9 — SPOT ELEVATION
- 5135 — CONTOUR
- RIPRAP
- SOIL CEMENT PAVING
- AREA TO BE OVEREXCAVATED FOR BERM STRUCTURAL KEYWAY
- REINFORCED CONCRETE PAVING
- COMPACTED EARTHEN FILL
- BASE COURSE SURFACE
- POND OUTLET STRUCTURE
- PIPE GATE(BY OTHERS)
- BARBED WIRE FENCE

EXISTING FEATURES

- 49.8 — SPOT ELEVATION
- 5150 — CONTOUR



SECTION A-A

SCALE: 1" = 30' HORIZ.
1" = 10' VERT.

AS BUILT INFORMATION
CONTRACTOR | DATE
STAKED BY | DATE
INSPECTOR'S ACCEPTANCE BY | DATE
VERIFICATION BY | DATE
DRAWINGS CORRECTED BY | DATE
MICRO-FILM INFORMATION
RECORDED BY | DATE
NO.

BENCH MARKS
STATION NAME: 1-40-2A
N.M.S.H.C. BRASS TABLET LOCATED ON THE NORTH SIDE OF U.S. HWY I-40 AND ABOUT 465' EAST OF UNSER BLVD. OVERPASS
NORTHING: 1,490,199.97
EASTING: 365,926.16
ELEVATION: 5165.89

SURVEY INFORMATION
FIELD NOTES

NO.	BY	DATE
TOPO	GEO SERVICE	1-93

ENGINEERS SEAL

REMARKS
REVISIONS

NO.	DATE	BY

DESIGN

		DATE
DESIGNED BY	VSF	10/93
DRAWN BY	PMT/JMM	10/93
CHECKED BY	VSF/CME	9/94

EASTERLING & ASSOCIATES, INC.
CONSULTING ENGINEERS
10131 Coors Rd., NW, Suite H-7/8
ALBUQUERQUE, NEW MEXICO 87114
(505) 898-8021 FAX (505) 898-8501

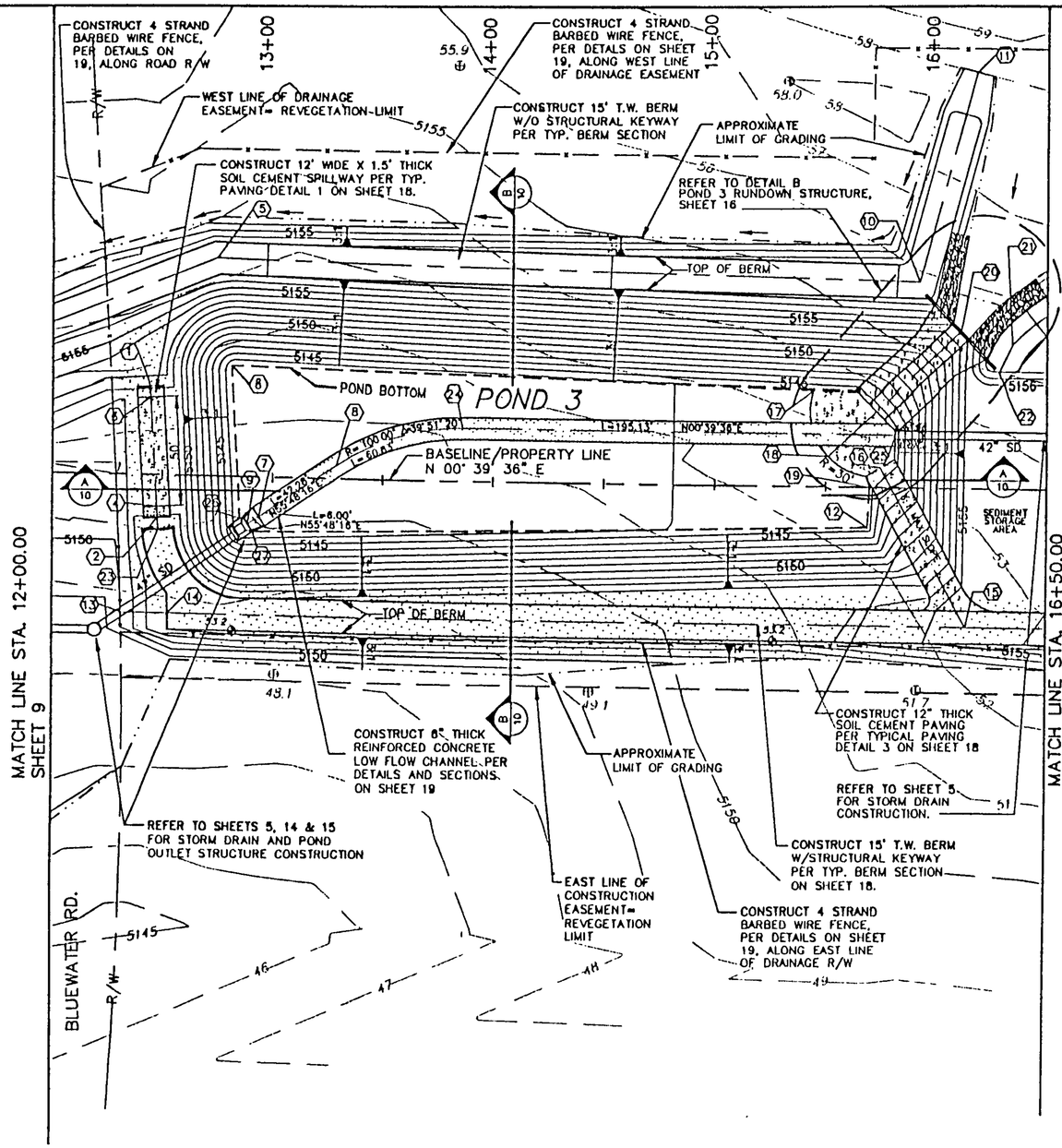
ALBUQUERQUE METROPOLITAN ARROYO FLOOD CONTROL AUTHORITY

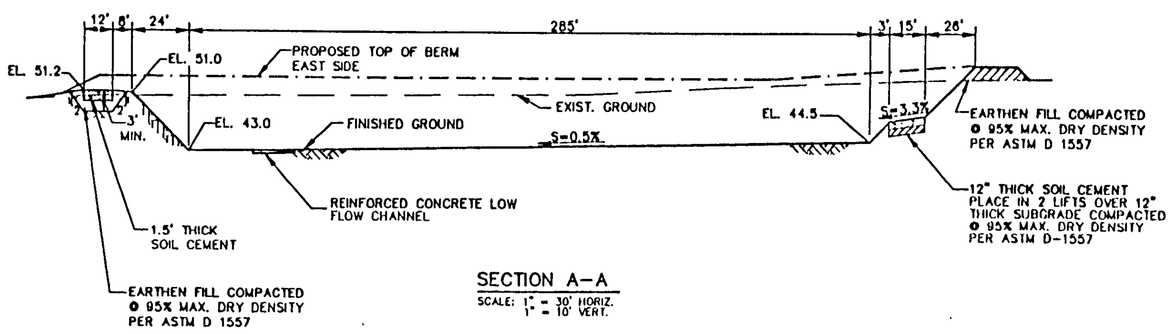
TITLE: UNSER DIVERSION
POND 2
GRADING PLAN AND SECTIONS

APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
AMAFCA					

PROJECT NO. 3324.0 | MAP NO. Z-K9 | SHEET 9 OF 25

DWG: T:\PROJECTS\DWG\3324\PD-02
TIME: 11-18-96 10:34:27





SECTION A–A

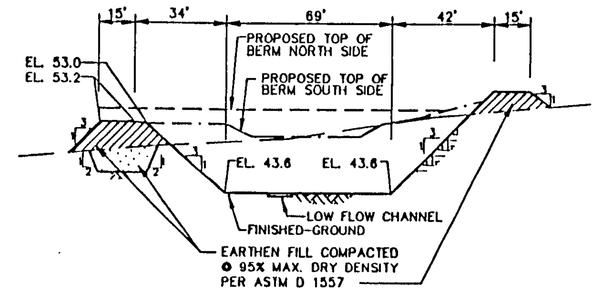
SCALE: 1" = 30' HORIZ. 1" = 10' VERT.

GRAPHIC SCALE

(IN FEET)
1 inch = 30 ft.

POND 3 POINT DATA

POINT I.D. NO.	STA.	OFFSET (FT)	ELEV.	POINT DESCRIPTION
1	12+43.9	40.3' LT	5152.2	℄ SPILLWAY PAVING @ W. EDGE OF PAVING
2	12+48.0	19.6' RT	5152.2	℄ SPILLWAY PAVING @ E. EDGE OF PAVING
3	12+44.2	35.3' LT	5151.2	℄ SPILLWAY @ W. TOE OF SLOPE
4	12+47.7	14.6' RT	5151.2	℄ SPILLWAY @ E. TOE OF SLOPE
5	12+73.4	99.3' LT	5156.9	P.I., ℄ OF BERM
6	12+80.7	50.0' LT	5143.3	S.W. CORNER OF POND BOTTOM
7	12+94.02	18.10' RT	5142.80	℄ LOW FLOW CHANNEL @ END OF TRANSITION
8	13+28.72	6.06' LT	5143.01	℄ LOW FLOW CHANNEL @ B.C.
9	12+89.10	21.53' RT	5142.50	℄ LOW FLOW CHANNEL @ FACE OF OUTLET STRUCTURE
10	15+91.0	93.2' LT	5159.0	P.I., – ℄ OF BERM
11	16+15.5	189.4' LT	5158.0	℄ BERM @ DAYLIGHT
12	15+69.1	18.1' RT	5144.5	N.E. CORNER OF POND BOTTOM
13	12+32.2	62.5' RT	5150.0	℄ BERM @ R/W LINE
14	12+53.4	62.5' RT	5153.2	℄ BERM @ TOP OF SLOPE
15	16+14.2	62.5' RT	5155.3	℄ BERM AND MAINT. RAMP
16	15+74.7	8.9' LT	5144.5	℄ MAINT. RAMP @ EDGE OF POND BOTTOM
17	15+43.9	43.7' LT	5144.5	W. EDGE OF POND BOTTOM @ EDGE OF SOIL CEMENT PAVING
18	15+50.9	14.0' LT	5144.5	℄ INLET STRUCTURE @ S.E. EDGE OF SOIL CEMENT PAVING
19	15+69.8	0.0	5144.5	N. EDGE OF POND BOTTOM
20	16+10.2	71.2' LT	5155.0	℄ INLET STRUCTURE @ FACE OF CUTOFF WALL
21	16+33.5	65.3' LT	5158.5	℄ OF BERM @ ANGLE POINT
22	16+27.8	52.5' LT	5158.0	℄ OF BERM @ END TOP OF SLOPE
23	12+48.4	24.7' RT	5153.2	℄ OF BERM @ END TOP OF SLOPE
24	13+85.87	24.00' LT	5143.32	℄ LOW FLOW CHANNEL @ E.C.
25	15+81.00	24.00' LT	5144.30	℄ LOW FLOW CHANNEL @ END OF STORM DRAIN
26	12+85.5	19.2' RT	5143.0	S. EDGE OF POND BOTTOM @ EDGE OF OUTLET STRUCTURE
27	12+91.5	24.9' RT	5143.0	E. EDGE OF POND BOTTOM @ E. EDGE OF OUTLET STRUCTURE



SECTION B–B

SCALE: 1" = 30' HORIZ. 1" = 10' VERT.

LEGEND

PROPOSED FEATURES

- 43.9 ⊕ SPOT ELEVATION
- 5135 CONTOUR
- RIPRAP
- SOIL CEMENT PAVING
- AREA TO BE OVEREXCAVATED FOR BERM STRUCTURAL KEYWAY
- REINFORCED CONCRETE PAVING
- COMPACTED EARTHEN FILL
- POND OUTLET STRUCTURE
- PIPE GATE(BY OTHERS)
- BARBED WIRE FENCE

EXISTING FEATURES

- ⊕ 49.8 SPOT ELEVATION
- 5150 CONTOUR

RECORD DRAWING

I, Charles M. Easterling hereby certify that these drawings have been revised in accordance with the information furnished by Surv-Tek, Inc. to reflect the construction as actually accomplished

Charles M. Easterling, P.E. N.M.P.E. No. 6411 — Date 5-8-97

EASTERLING & ASSOCIATES, INC.
CONSULTING ENGINEERS
10131 Coors Rd., NW, Suite H-7/8
ALBUQUERQUE, NEW MEXICO 87114
(505) 898-8021 FAX (505) 898-8501

ALBUQUERQUE METROPOLITAN ARROYO FLOOD CONTROL AUTHORITY

TITLE: UNSER DIVERSION
POND 3
GRADING PLAN AND SECTIONS

APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
AMAFCA					

PROJECT NO. 3324.0 | MAP NO. Z-K9 | SHEET 10 OF 25

AS BUILT INFORMATION
CONTRACTOR — DATE
SURVEY BY — DATE
INSPECTOR'S ACCEPTANCE BY — DATE
VERIFICATION BY — DATE
DRAWINGS CORRECTED BY — DATE
MICRO-FILM INFORMATION
RECORDED BY — DATE
NO.

BENCH MARKS
STATION NAME: 1-40-20A
N.M.S.H.C. BRASS TABLET LOCATED ON THE NORTH SIDE OF U.S. HWY. I-40 AND ABOUT 465' EAST OF UNSER BLVD. OVERPASS
NORTHING: 1,490,195.97
EASTING: 345,926.18
ELEVATION: 5165.89

SURVEY INFORMATION
FIELD NOTES

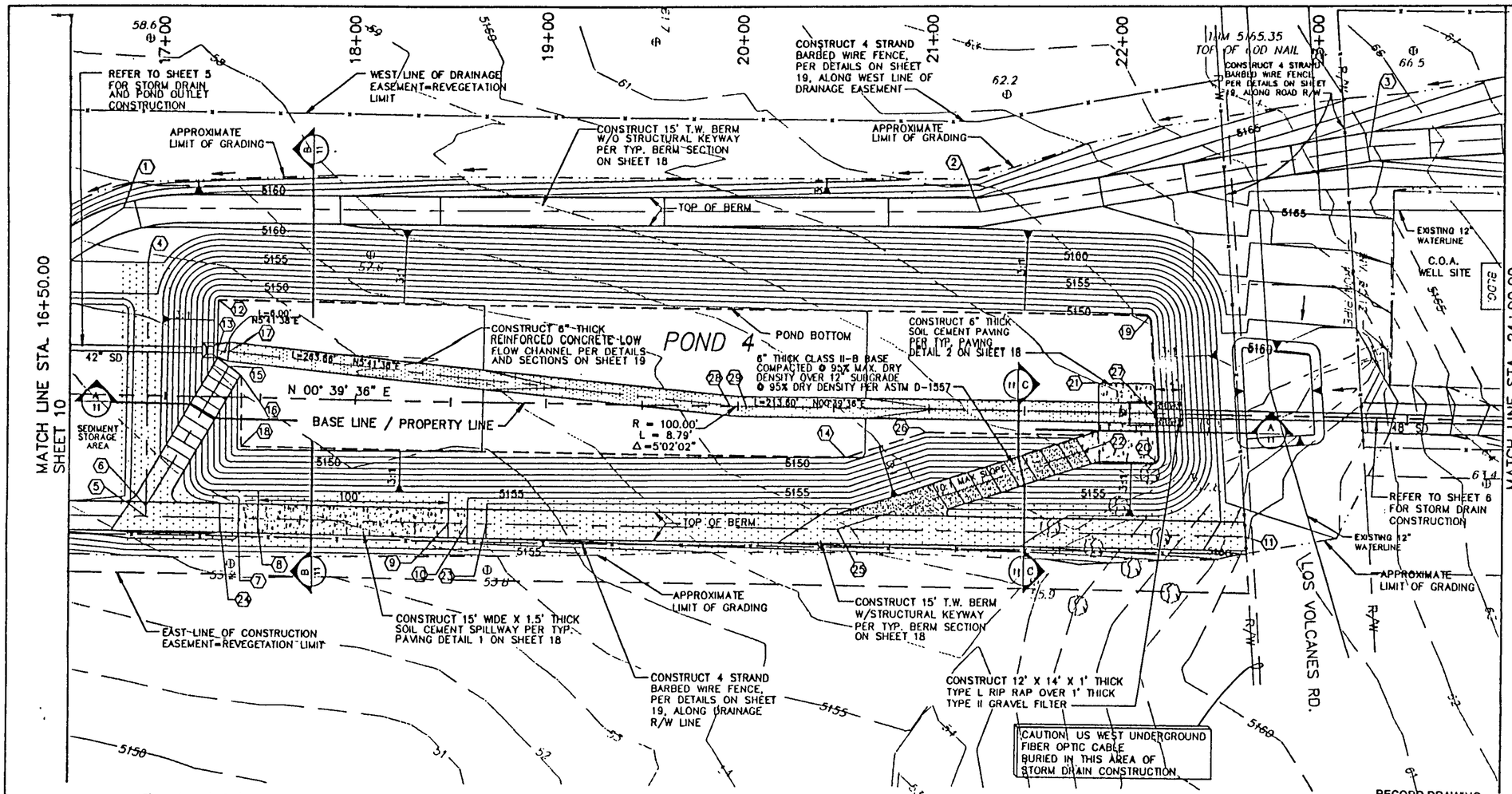
NO.	BY	DATE
TOPO	GEO SERVICE	04-93

ENGINEER'S SEAL

NO.	DATE	REMARKS	BY

REVISIONS

		DATE
DESIGNED BY	VSF	10/93
DRAWN BY	PMT,JMN	10/93
CHECKED BY	VSF,CME	9/94



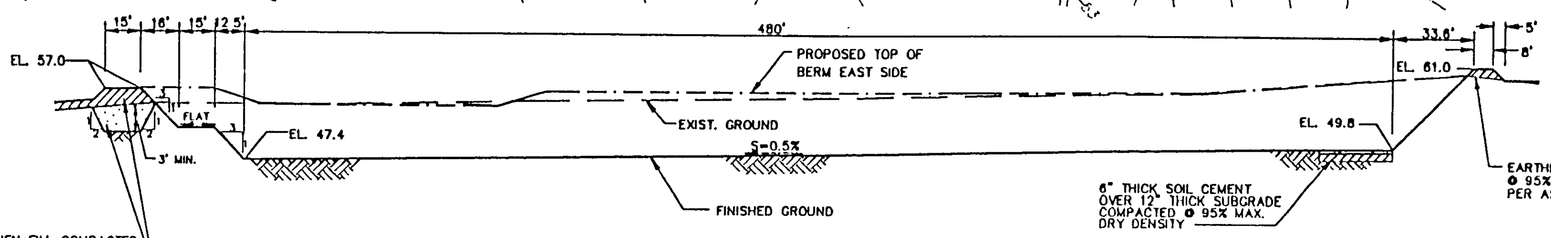
LEGEND

PROPOSED FEATURES

- 43.9 ⊕ SPOT ELEVATION
- 5135 CONTOUR
- RIPRAP
- SOIL CEMENT PAVING
- AREA TO BE OVEREXCAVATED FOR BERM STRUCTURAL KEYWAY
- REINFORCED CONCRETE PAVING
- COMPACTED EARTHEN FILL
- BASE COURSE SURFACE
- POND OUTLET STRUCTURE
- PIPE GATE(BY OTHERS)
- BARBED WIRE FENCE

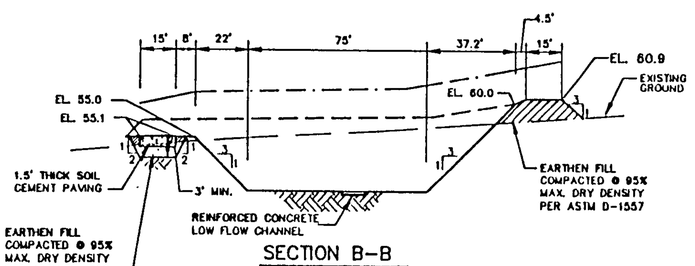
EXISTING FEATURES

- ⊕ 49.8 SPOT ELEVATION
- 5150 CONTOUR



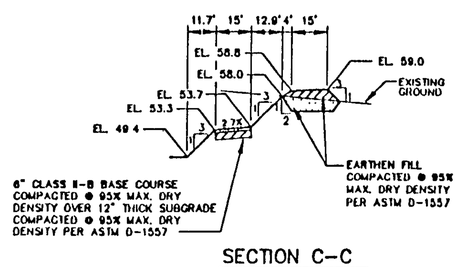
SECTION A–A

SCALE: 1" = 30' HORIZ.
1" = 10' VERT.



SECTION B–B

SCALE: 1" = 30' HORIZ.
1" = 10' VERT.



SECTION C–C

SCALE: 1" = 30' HORIZ.
1" = 10' VERT.

POND 4 POINT DATA

POINT NO.	I.D.	STA.	OFFSET (FT)		ELEV.	POINT DESCRIPTION
1		16+76.4	98.1'	LT	5159.9	P.I. ℄ OF BERM
2		21+25.0	102.6'	LT	5184.4	P.I. ℄ OF BERM
3		23+27.8	139.8'	LT	5168.1	P.I. ℄ OF BERM
4		16+89.6	69.2'	LT	5159.0	℄ OF BERM @ END OF KEY WAY
5		16+91.3	62.5'	RT	5157.0	℄ OF E/W & N/S BERMS
6		16+91.3	27.0'	RT	5157.0	℄ E/W BERM & MAINT. RAMP
7		17+40.0	62.5'	RT	5156.1	℄ BERM & SPILLWAY PAVING @ S. EDGE OF PAVING
8		18+50.0	62.5'	RT	5155.1	℄ SPILLWAY PAVING @ TOE OF SLOPE
9		18+50.0	62.5'	RT	5155.1	℄ SPILLWAY PAVING @ TOE OF SLOPE
10		18+60.0	62.5'	RT	5156.1	℄ BERM & SPILLWAY PAVING @ N. EDGE OF PAVING
11		23+66.9	62.5'	RT	5160.4	℄ N/S BERM @ R/W LINE
12		17+27.0	50.0'	LT	5147.4	S.W. CORNER OF POND BOTTOM
13		17+27.00	24.05'	LT	5148.80	℄ LOW FLOW CHANNEL @ FACE OF OUTLET STRUCTURE
14		20+56.8	25.1'	RT	5149.0	E. EDGE OF POND BOTTOM @ ANGLE POINT
15		17+33.2	13.8'	LT	5147.3	℄ OF MAINT. RAMP @ EDGE OF SOIL CEMENT PAVING
16		17+39.4	11.6'	LT	5147.3	N. EDGE OF MAINT. RAMP @ EDGE OF SOIL CEMENT PAVING
17		17+32.98	23.52'	LT	5147.10	℄ LOW FLOW CHANNEL @ END OF TRANSITION
18		17.40.5	25.0'	RT	5147.4	S.E. CORNER OF POND BOTTOM
19		22+14.2	49.1'	RT	5149.8	N.W. CORNER OF POND BOTTOM
20		22+19.7	24.1'	RT	5149.8	N.E. CORNER OF POND BOTTOM/ N.E. CORNER OF SOIL CEMENT PAVING
21		21+88.8	15.0'	LT	5149.7	S.W. CORNER OF SOIL CEMENT PAVING
22		21+89.4	17.7'	RT	5149.7	℄ MAINT. RAMP @ GRADE BREAK
23		16+70.0	62.5'	RT	5157.0	℄ N/S BERM END TOP OF SLOPE
24		17+30.0	62.5'	RT	5157.0	℄ N/S BERM END TOP OF SLOPE
25		20+53.1	62.5'	RT	5156.2	℄ OF MAINT. RAMP @ ℄ OF BERM
26		20+98.6	11.7'	RT	5149.2	E. EDGE OF POND BOTTOM @ ANGLE POINT
27		22+18.00	0.00		5149.60	℄ LOW FLOW CHANNEL @ END OF STORM DRAIN
28		19+95.62	0.39'	LT	5148.45	℄ LOW FLOW CHANNEL @ B.C.
29		20+04.40	0.00		5148.53	℄ LOW FLOW CHANNEL @ E.C.

RECORD DRAWING

I, Charles M. Easterling, hereby certify that these drawings have been revised in accordance with the information furnished by Surv-Tek, Inc. to reflect the construction as actually accomplished

Charles M. Easterling, P.E. — Date 5-8-97
N.M.P.E. No 6411

GRAPHIC SCALE
(IN FEET)
1 inch = 30 ft.

AS BUILT INFORMATION

CONTRACTOR — DATE
WORK STAKED BY — DATE
INSPECTED BY — DATE
VERIFICATION BY — DATE
DRAWINGS CORRECTED BY — DATE

MICRO-FILM INFORMATION
RECORDED BY — DATE
NO.

BENCH MARKS

STATION NAME: 1-40-20A
N.M.S.H.C. BRASS TABLET LOCATED ON THE NORTH SIDE OF U.S. HWY. I-40 AND ABOUT 465' EAST OF UNSER BLVD. OVERPASS

NORTHING: 1,490,199.97
EASTING: 365,926.16
ELEVATION: 5165.89

SURVEY INFORMATION

FIELD NOTES

NO.	BY	DATE
TOPO	GEO SERVICE	4-93

ENGINEERS SEAL

NO.	DATE	REMARKS	BY
		REVISIONS	

DESIGNED BY VSF — DATE 10/93
DRAWN BY PMT./JMN — DATE 10/93
CHECKED BY VSF/CME — DATE 9/94

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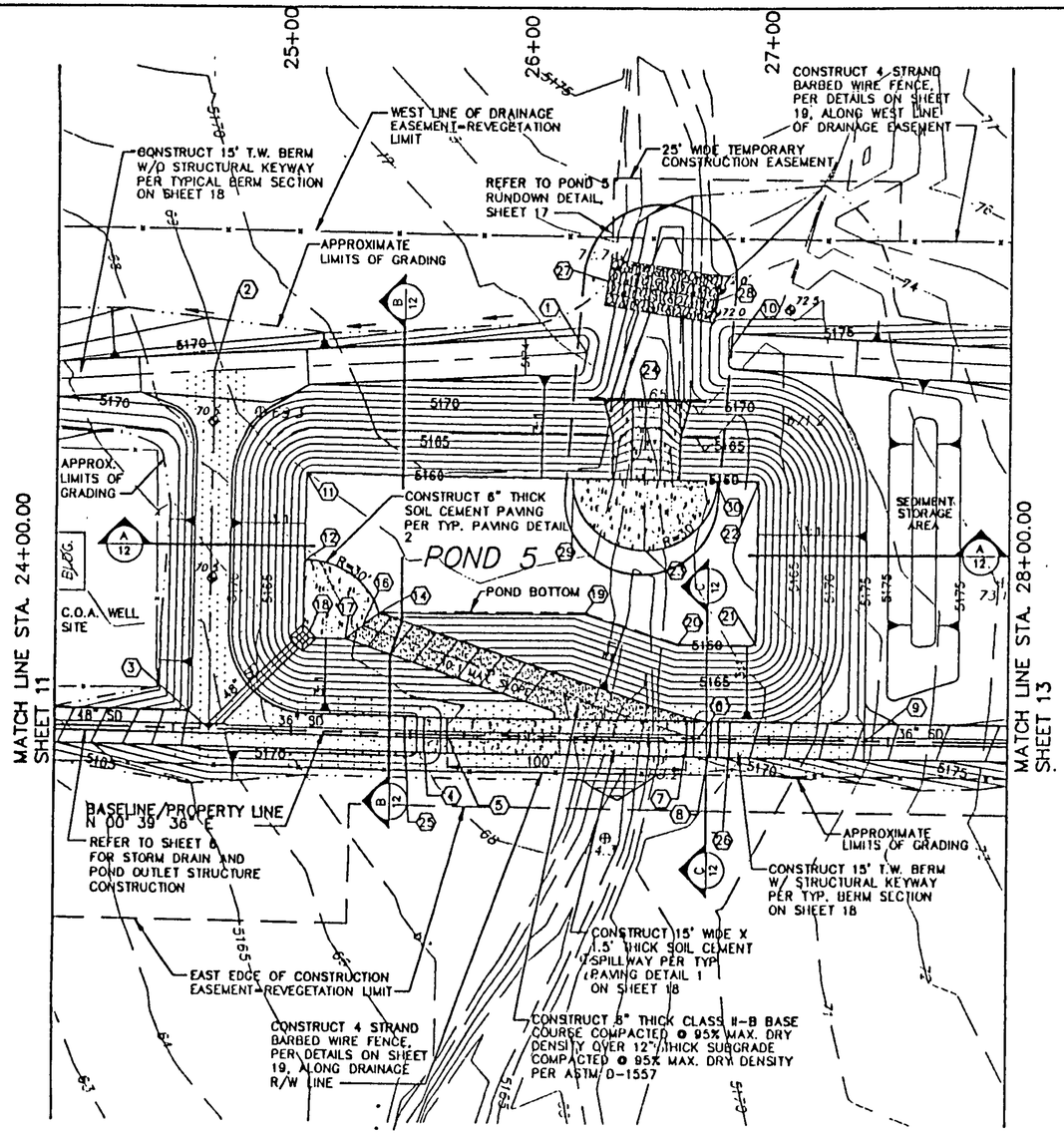
ALBUQUERQUE METROPOLITAN ARROYO FLOOD CONTROL AUTHORITY

TITLE: **UNSER DIVERSION**
POND 4
GRADING PLAN AND SECTIONS

APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
AMAFCA					

3324.0 — MAP NO. Z-K9 — SHEET 11 OF 25

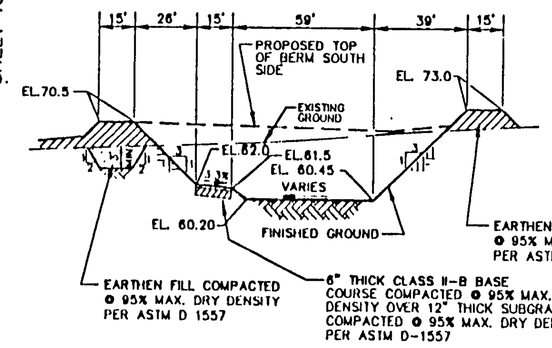


GRAPHIC SCALE

(IN FEET)
1 inch = 30 ft.

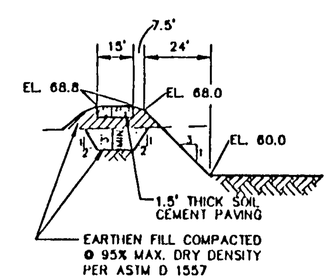
POND 5 POINT DATA

POINT I.D. NO.	STA.	OFFSET (FT)	ELEV.	POINT DESCRIPTION
1	26+21.0	161.1' LT	5174.0	BERM @ TOP OF SLOPE
2	24+64.1	149.7' LT	5171.4	℄ N/S BERM @ INT. W/ E/W BERM – END OF E/W KEY WAY
3	24+65.0	0.0	5170.5	℄ N/S BERM @ INT. W/ E/W BERM
4	25+55.7	0.0	5169.8	℄ SPILLWAY PAVING @ S. EDGE OF PAVING
5	25+65.7	0.0	5168.8	℄ SPILLWAY PAVING @ TOE OF SLOPE
6	26+70.3	0.0	5168.8	℄ SPILLWAY PAVING @ INT. W/ MAINT. RAMP
7	26+65.7	0.0	5168.8	℄ SPILLWAY PAVING @ TOE OF SLOPE
8	26+75.7	0.0	5169.8	℄ SPILLWAY PAVING @ N. EDGE OF PAVING
9	27+40.0	0.0	5174.2	℄ BERM @ END OF N/S KEY WAY
10	26+80.0	162.6' LT	5175.0	℄ BERM @ TOP OF SLOPE
11	25+04.1	108.9' LT	5160.30	S.W. CORNER OF POND BOTTOM
12	25+04.1	71.7' LT	5160.15	S.W. CORNER OF SOIL CEMENT PAVING @ EDGE OF POND BOTTOM
14	25+35.8	50.4' LT	5160.15	N.E. CORNER OF SOIL CEMENT PAVING
16	25+28.7	44.7' LT	5160.11	℄ MAINT. RAMP @ EDGE OF SOIL CEMENT PAVING
17	25+21.7	39.0' LT	5160.06	S.E. CORNER OF SOIL CEMENT PAVING @ EDGE OF POND BOTTOM
18	25+06.9	41.8' LT	5160.0	℄ S.D. & OUTLET STRUCTURE @ FACE OF OUTLET
19	26+22.4	52.1' LT	5160.62	EDGE OF POND BOTTOM @ P.I.
20	26+61.4	39.4' LT	5160.72	EDGE OF POND @ P.I.
21	26+93.9	39.3' LT	5160.91	N.E. CORNER OF POND BOTTOM
22	26+93.8	108.8' LT	5160.91	N.W. CORNER OF POND BOTTOM
23	26+46.6	79.0' LT	5160.72	℄ INLET STRUCTURE @ E. EDGE OF PAVING
24	26+45.9	141.0' LT	5167.7	℄ INLET STRUCTURE @ W. EDGE OF PAVING
25	25+47.7	0.0	5170.5	℄ BERM @ END TOP OF SLOPE
26	26+83.6	0.0	5170.5	℄ BERM @ END TOP OF SLOPE
27	26+29.2	191.4' LT	5072.0	℄ RIPRAP SLOPE PROTECTION @ S. EDGE
28	26+76.1	184.3' LT	5072.0	℄ RIPRAP SLOPE PROTECTION @ N. EDGE
29	26+16.3	109.0' LT	5060.72	INLET STRUCTURE @ S EDGE OF PAVING
30	26+78.3	109.0' LT	5060.72	INLET STRUCTURE @ N EDGE OF PAVING



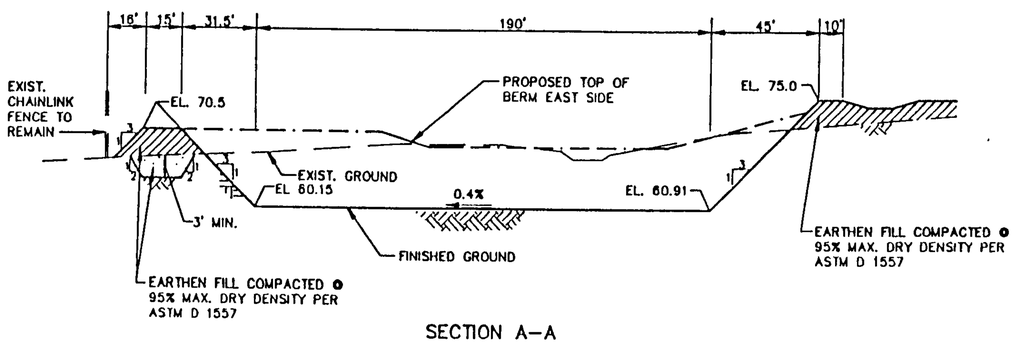
SECTION B–B

SCALE: 1" = 30' HORIZ.
1" = 10' VERT.



SECTION C–C

SCALE: 1" = 30' HORIZ.
1" = 10' VERT.



SECTION A–A

SCALE: 1" = 30' HORIZ.
1" = 10' VERT.

RECORD DRAWING

I, Charles M. Easterling, hereby certify that these drawings have been revised in accordance with the information furnished by Surv-Tek, Inc. to reflect the construction as actually accomplished

Charles M. Easterling, P.E. — Date 5-8-97
N.M.P.E. No. 6411

LEGEND

PROPOSED FEATURES

- 439 ⊕ — SPOT ELEVATION
- 5135 — CONTOUR
- RIPRAP
- SOIL CEMENT PAVING
- AREA TO BE OVEREXCAVATED FOR BERM STRUCTURAL KEYWAY
- COMPACTED EARTHEN FILL
- BASE COURSE SURFACE
- POND OUTLET STRUCTURE
- BARBED WIRE FENCE

EXISTING FEATURES

- ⊕ 49.8 — SPOT ELEVATION
- 5150 — CONTOUR

AS BUILT INFORMATION
CONTRACTOR — DATE
WORK STAKED BY — DATE
INSPECTOR'S ACCEPTANCE BY — DATE
VERIFICATION BY — DATE
DRAWINGS CORRECTED BY — DATE
MICRO-FILM INFORMATION
RECORDED BY — DATE
NO.

BENCH MARKS
STATION NAME: 1-40-20A
N.M.S.H.C. BRASS TABLET LOCATED ON THE NORTH SIDE OF U.S. HWY. 1-40 AND ABOUT 465' EAST OF UNSER BLVD. OVERPASS
NORTHING: 1,490,196.97
EASTING: 365,926.16
ELEVATION: 5165.89

SURVEY INFORMATION
FIELD NOTES

NO.	BY	DATE
TOPO	GEO SERVICE	4-93

ENGINEER'S SEAL

NO.	DATE	REMARKS	BY
		REVISIONS	

DESIGN
DESIGNED BY VSF — DATE 10/93
DRAWN BY PMT, JMM — DATE 10/93
CHECKED BY VSF, DAE — DATE 9/94

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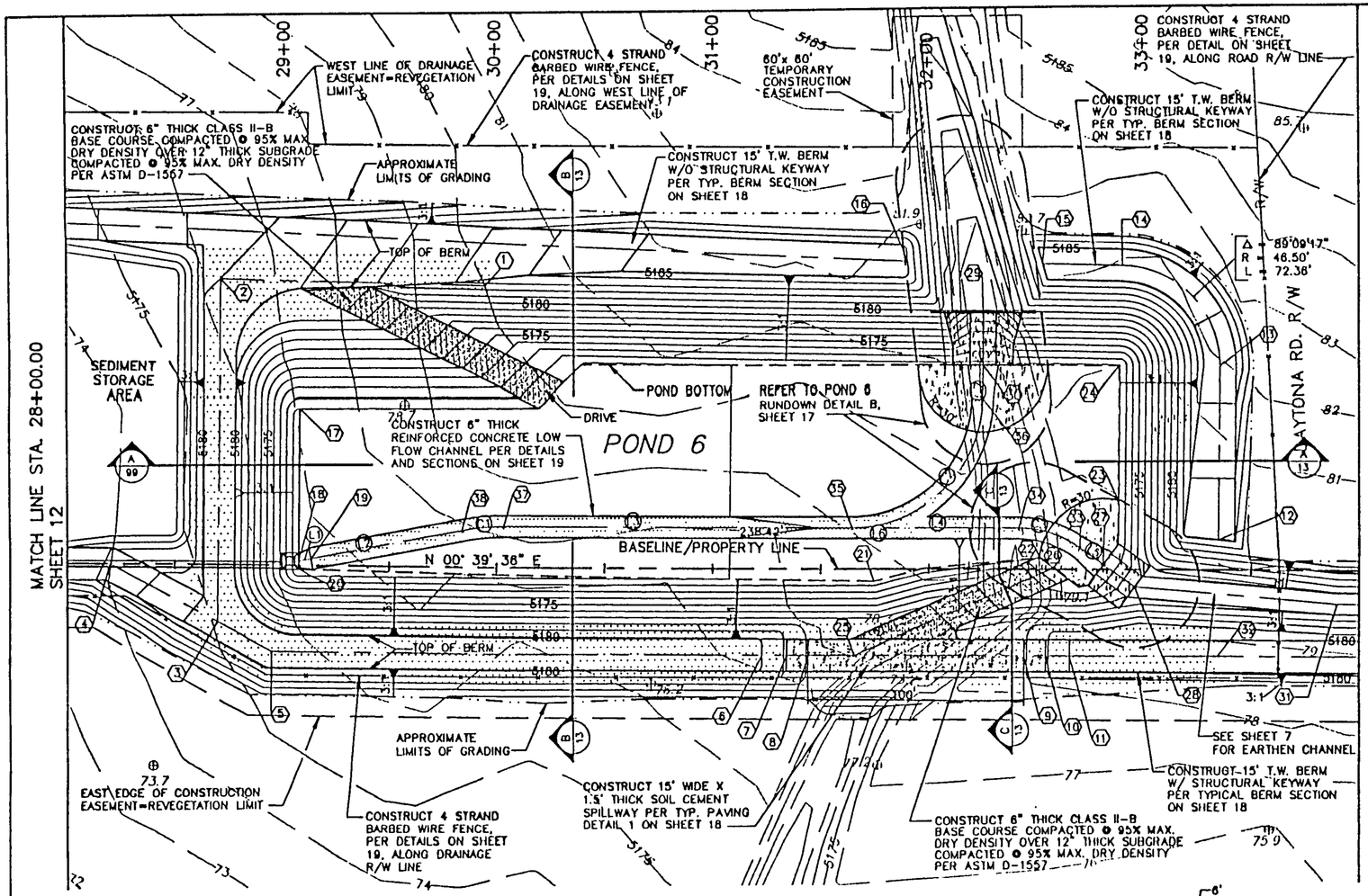
ALBUQUERQUE METROPOLITAN ARROYO FLOOD CONTROL AUTHORITY

TITLE: UNSER DIVERSION
POND 5
GRADING PLAN AND SECTIONS

APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
AMAFCA			COA – HYD		

PROJECT NO. 3324.0 | MAP NO. Z-K9 | SHEET 12 OF 25



GRAPHIC SCALE

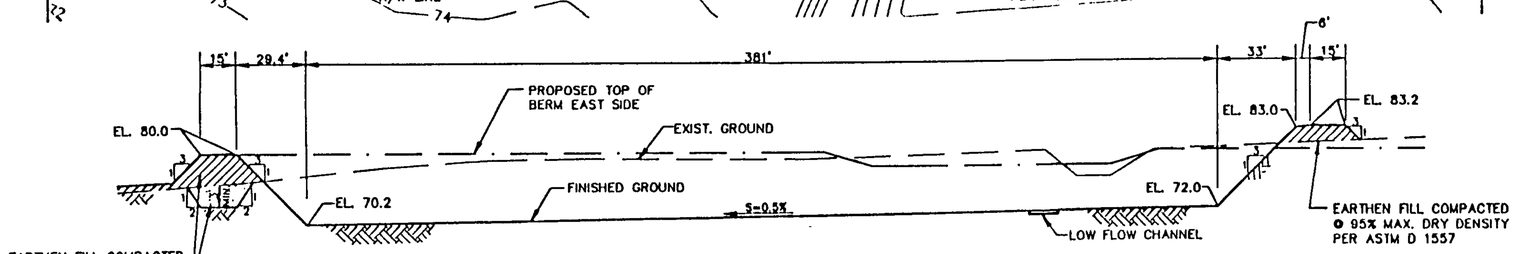
(IN FEET)
1 inch = 30 ft.

POND 6 POINT DATA

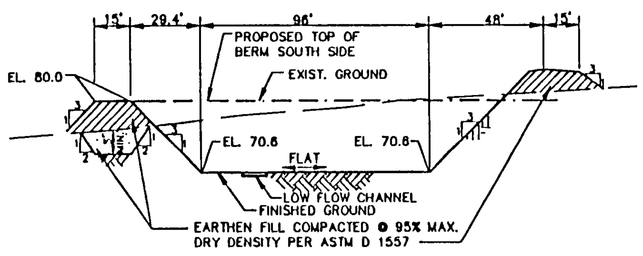
POINT I.D. NO.	STA.	OFFSET (FT)	ELEV.	POINT DESCRIPTION
1	29+93.4	129.5' LT	5182.7	℄ N/S KEY WAY @ END OF KEY WAY
2	28+70.4	131.8' LT	5180.0	℄ N/S KEY WAY AND E/W KEY WAY @ INT.
3	28+70.3	26.3' RT	5180.0	℄ N/S AND E/W BERMS @ INT.
4	28+20.0	0.0	5178.1	℄ ACCESS RD/BERM @ ANGLE POINT
5	28+95.5	40.0' RT	5180.0	℄ BERM @ ANGLE POINT
6	31+23.2	40.0' RT	5180.0	℄ BERM @ TOP OF SLOPE
7	31+34.6	40.0' RT	5178.9	℄ SPILLWAY PAVING @ SOUTH EDGE OF PAVING
8	31+44.6	40.0' RT	5177.9	℄ SPILLWAY PAVING @ TOE OF SLOPE
9	32+44.6	40.0' RT	5177.9	℄ SPILLWAY PAVING @ TOE OF SLOPE
10	32+54.6	40.0' RT	5178.9	℄ SPILLWAY PAVING @ NORTH EDGE OF PAVING
11	32+65.7	40.0' RT	5180.0	℄ BERM @ TOP OF SLOPE
12	33+34.5	14.0' LT	5182.0	℄ E/W BERM @ TOP OF SLOPE
13	33+34.6	93.0' LT	5184.4	℄ E/W BERM @ P.T.
14	32.88.6	139.8' LT	5185.0	℄ N/S BERM @ P.C.
15	32.51.6	140.3' LT	5185.0	℄ N/S BERM @ TOP OF SLOPE
16	31+89.0	141.4' LT	5185.0	℄ N/S BERM @ TOP OF SLOPE
17	29+07.8	72.4' LT	5170.5	S.W. CORNER OF POND BOTTOM
18	29+07.78	2.00' LT	5169.50	℄ OF LOW FLOW CHANNEL @ FACE OF OUTLET STRUCTURE
19	29+13.67	3.17' LT	5169.80	℄ OF LOW FLOW CHANNEL @ END OF TRANSITION
20	29+07.8	2.0' RT	5170.00	S.E. CORNER OF POND BOTTOM
21	31+74.8	5.9' RT	5171.4	EAST SIDE OF POND BOTTOM @ ANGLE POINT
22	32+51.3	5.7' LT	5171.8	EAST SIDE OF POND BOTTOM @ EDGE OF SOIL CEM. PAV.
23	32+87.9	31.5' LT	5172.0	NORTH SIDE OF POND BOTTOM @ EDGE OF SOIL CEM. PAV.
24	32+87.8	93.0' LT	5172.0	N.W. CORNER OF POND BOTTOM
25	31+66.0	40.0' RT	5177.9	℄ OF SPILLWAY PAVING AND MAINT. RAMP @ INT.
26	32+58.0	0.4' LT	5171.9	℄ OF MAINT. ROAD @ BOTTOM OF POND
27	32+80.0	2.3' LT	5171.80	℄ OF INLET STRUCTURE & ℄ OF LOW FLOW CHANNEL @ EDGE OF POND BOTTOM
28	32+95.8	8.0' RT	5175.0	℄ OF INLET STRUCTURE @ N. EDGE OF PAVING
29	32+24.3	115.5' LT	5176.7	℄ OF INLET STRUCTURE @ W. EDGE OF PAVING
30	32+24.32	93.0' LT	5171.70	℄ OF INLET STRUCTURE & LOW FLOW CHANNEL @ WEST EDGE OF POND BOTTOM
31	33+90.0	15.5' RT	5175.8	℄ OF CHANNEL @ ANGLE POINT
32	33+34.0	40.0' RT	5180.0	℄ OF N/S BERM @ N. END OF N.S. KEYWAY
33	32+70.21	9.93' LT	5171.60	℄ OF LOW FLOW CHANNEL @ E.C./START OF WIDTH TRANSITION
34	32+41.50	19.00' LT	5171.45	℄ OF LOW FLOW CHANNEL @B.C.
35	31+64.32	19.00' LT	5171.06	INTERSECTION OF LOW FLOW CHANNELS CENTERLINES
36	32+24.32	79.00' LT	5171.53	℄ OF LOW FLOW CHANNEL @ E.C/START OF WIDTH TRANSITION
37	30+03.08	19.00' LT	5170.25	℄ OF LOW FLOW CHANNEL @ E.C
38	29+83.57	17.08' LT	5170.16	℄ OF LOW FLOW CHANNEL @ B.C

CURVE	RADIUS	LENGTH	TANGENT	DELTA
C1	100.00'	19.64'	9.85'	11°15'07"
C2	60.00'	94.25'	60.00'	90°00'00"
C3	50.00'	30.58'	15.79'	35°02'44"

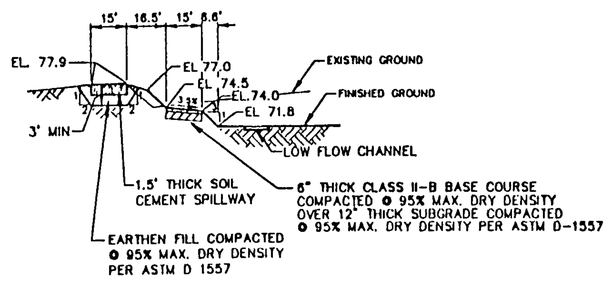
LINE	DIRECTION	DISTANCE
L1	N10°35'31"W	6.00'
L2	N10°35'31"W	71.27'
L3	N00°39'36"E	161.24'
L4	N00°39'36"E	77.18'
L5	N33°52'23"E	13.24'
L6	S00°39'36"W	238.42'
L7	N89°20'24"W	14.00'



SECTION A-A
SCALE: 1" = 30' HORIZ.
1" = 10' VERT.



SECTION B-B
SCALE: 1" = 30' HORIZ.
1" = 10' VERT.



SECTION C-C
SCALE: 1" = 30' HORIZ.
1" = 10' VERT.

LEGEND

PROPOSED FEATURES

- 439 ⊕ SPOT ELEVATION
- —5135— CONTOUR
- REINFORCED CONCRETE PAVING
- SOIL CEMENT PAVING
- AREA TO BE OVEREXCAVATED FOR BERM STRUCTURAL KEYWAY
- COMPACTED EARTHEN FILL
- BASE COURSE SURFACE
- POND OUTLET STRUCTURE
- PIPE GATE(BY OTHERS)
- —x—x—x— BARBED WIRE FENCE

EXISTING FEATURES

- ⊕49.8 SPOT ELEVATION
- —5150— CONTOUR

RECORD DRAWING

I, Charles M. Easterling, hereby certify that these drawings have been revised in accordance with the information furnished by Surv-Tek, Inc. to reflect the construction as actually accomplished

Charles M. Easterling, P.E. 5-8-97
N.M.P.E. No 6411 Date.

AS BUILT INFORMATION
CONTRACTOR
WORK STAKED BY DATE
INSPECTOR'S ACCEPTANCE DATE
FIELD VERIFICATION BY DATE
DRAWINGS CORRECTED BY DATE
MICRO-FILM INFORMATION
RECORDED BY DATE
NO.

BENCH MARKS
STATION NAME: I-40-204
N.M.S.H.C. BRASS TABLET LOCATED ON THE NORTH SIDE OF I-40 AND ABOUT 465' EAST OF UNSER BLVD.
NORTHING: 1,490,199.97
EASTING: 365,926.16
ELEVATION: 5165.89

SURVEY INFORMATION
FIELD NOTES

NO.	BY	DATE
TOPO	GEO SERVICE	4-93

U.S. HWY. I-40 OVERPASS

ENGINEER'S SEAL
Charles M. Easterling 5-8-97

NO.	DATE	REMARKS	BY
		REVISIONS	
		DESIGN	

DESIGNED BY VSF DATE 10/93
DRAWN BY PMT,JMN DATE 10/93
CHECKED BY VSF, DME DATE 8/94

EASTERLING & ASSOCIATES, INC.
CONSULTING ENGINEERS
10131 Coors Rd., NW, Suite H-7/8
ALBUQUERQUE, NEW MEXICO 87114
(505) 898-8021 FAX (505) 898-8501

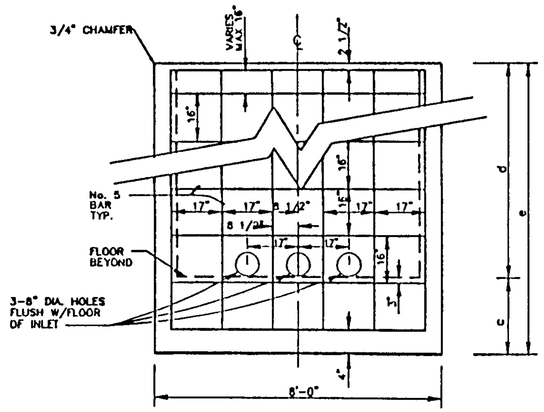
ALBUQUERQUE METROPOLITAN ARROYO FLOOD CONTROL AUTHORITY

TITLE: UNSER DIVERSION
POND 6
GRADING PLAN AND SECTIONS

APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
AMAFCA					

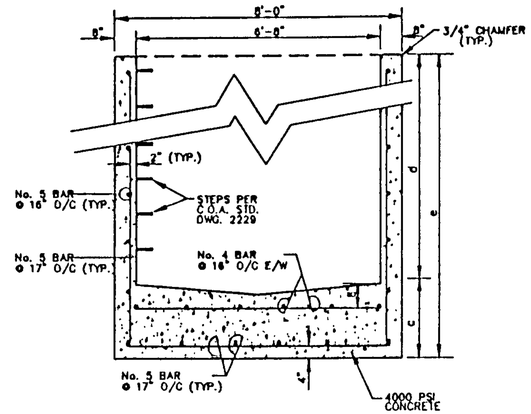
PROJECT NO. 3324.0 | MAP NO. Z-K9 | SHEET 13 OF 25

ADDENDUM NO. 1 REPLACEMNT SHEET

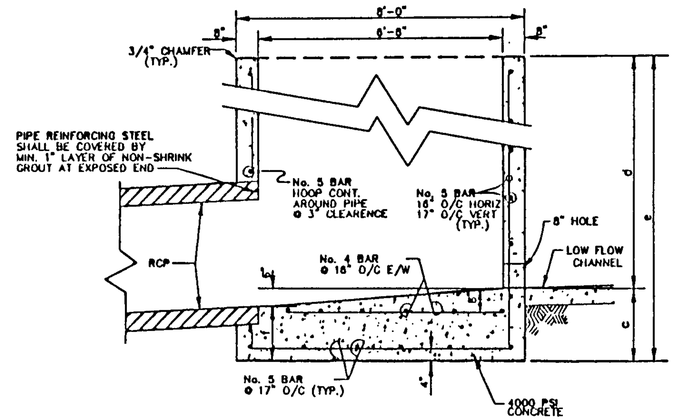


NOTE: ACCURATE PLACEMENT OF REINFORCING STEEL TO THE DIMENSIONS SHOWN IS REQUIRED TO FACILITATE CORING OF HOLES THROUGH THE FRONT WALL OF THE STRUCTURE.

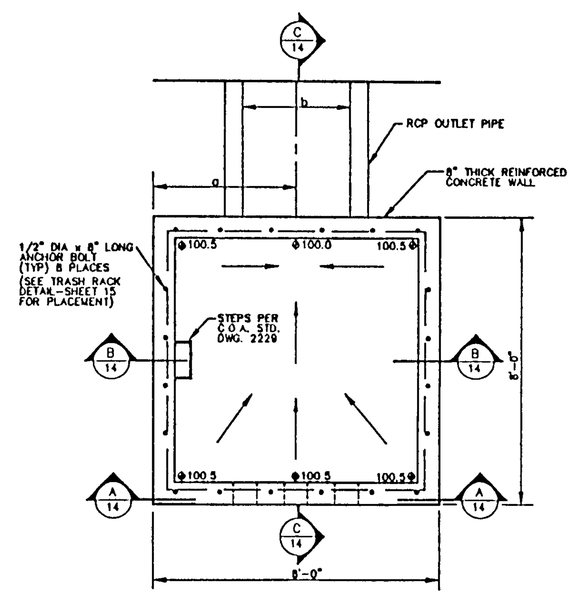
SECTION A-A
NOT TO SCALE



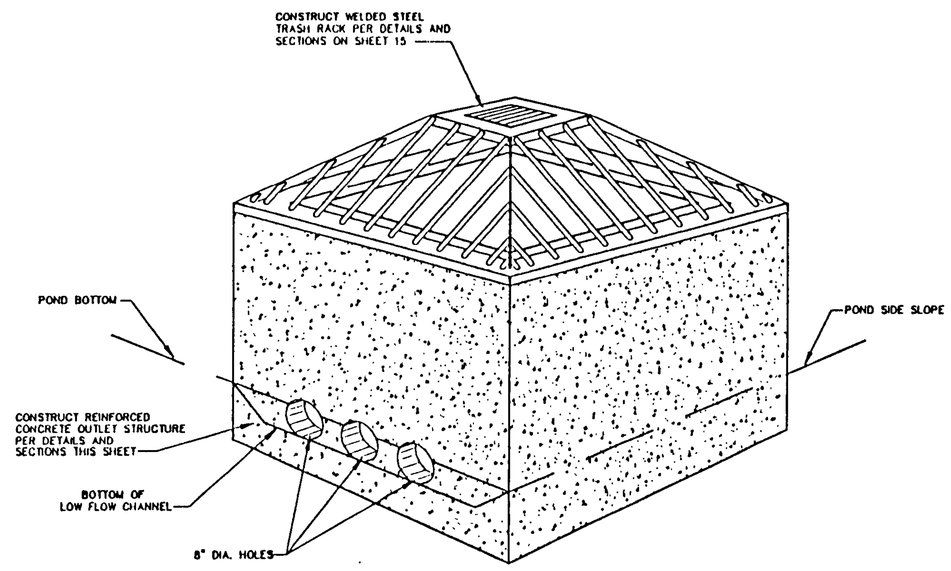
SECTION B-B
NOT TO SCALE



SECTION C-C
NOT TO SCALE



OUTLET STRUCTURE DETAIL – PLAN
SCALE. 1" = 2'



ISOMETRIC – CONCRETE OUTLET STRUCTURE
NOT TO SCALE

CONCRETE OUTLET STRUCTURE DIMENSIONS

POND No.	* a	b	c	d	e	f	TOP OF WALL ELEVATION
1	4'-0"	3'-8"	3'-1"	8'-0"	11'-1"	2'-7"	5141.0
2	4'-0"	4'-0"	2'-11"	7'-4½"	10'-3½"	2'-5"	5144.8
3	4'-0"	3'-8"	2'-5"	5'-0"	7'-5"	1'-11"	5147.5
4	4'-0"	3'-8"	2'-5"	5'-1½"	7'-6½"	1'-11"	5151.9
5	4'-0"	4'-0"	2'-4"	4'-5"	6'-9"	1'-8"	5164.0
6	2'-0"	3'-0"	2'-9"	6'-6"	9'-3"	2'-3"	5176.0

* THE "a" DIMENSION IS THE DISTANCE FROM THE CENTERLINE OF PIPE TO THE RIGHT OUTSIDE EDGE OF THE OUTLET STRUCTURE.

RECORD DRAWING
I, Charles M. Easterling, hereby certify that these drawings have been revised in accordance with the information furnished by Surv-Tek, Inc. to reflect the construction as actually accomplished

5-8-97
Charles M. Easterling, P.E. — Date
N.M.P.E. No. 8411

AS BUILT INFORMATION
CONTRACTOR — DATE
STAKE STAKED BY — DATE
INSPECTOR'S FIELD CHANGE BY — DATE
VERIFICATION BY — DATE
MARKS CORRECTED BY
MICRO-FILM INFORMATION
RECORDED BY — DATE
NO.

BENCH MARKS
STATION NAME: 1-40-20A
N.M.S.H.C. BRASS TABLET LOCATED ON THE NORTH SIDE OF U.S. HWY. 1-40 AND ABOUT 465' EAST OF UNSER BLVD. OVERPASS
NORTHING: 1,490,199.97
EASTING: 365,926.16
ELEVATION: 5165.89

SURVEY INFORMATION
FIELD NOTES

NO.	BY	DATE
TOPO	GEO SERVE	10-1-93

ENGINEERS SEAL
REGISTERED PROFESSIONAL ENGINEER 6411
11-2-96

NO.	DATE	REMARKS	BY
		REVISIONS	
		DESIGN	

DESIGNED BY VSF — DATE 10/93
DRAWN BY ALM/PMT/JMM — DATE 10/93
CHECKED BY VSF/CME — DATE 9/94

EASTERLING & ASSOCIATES, INC.
CONSULTING ENGINEERS
10131 Coors Rd., NW, Suite H-7/8
ALBUQUERQUE, NEW MEXICO 87114
(505) 898-8021 FAX (505) 898-8501

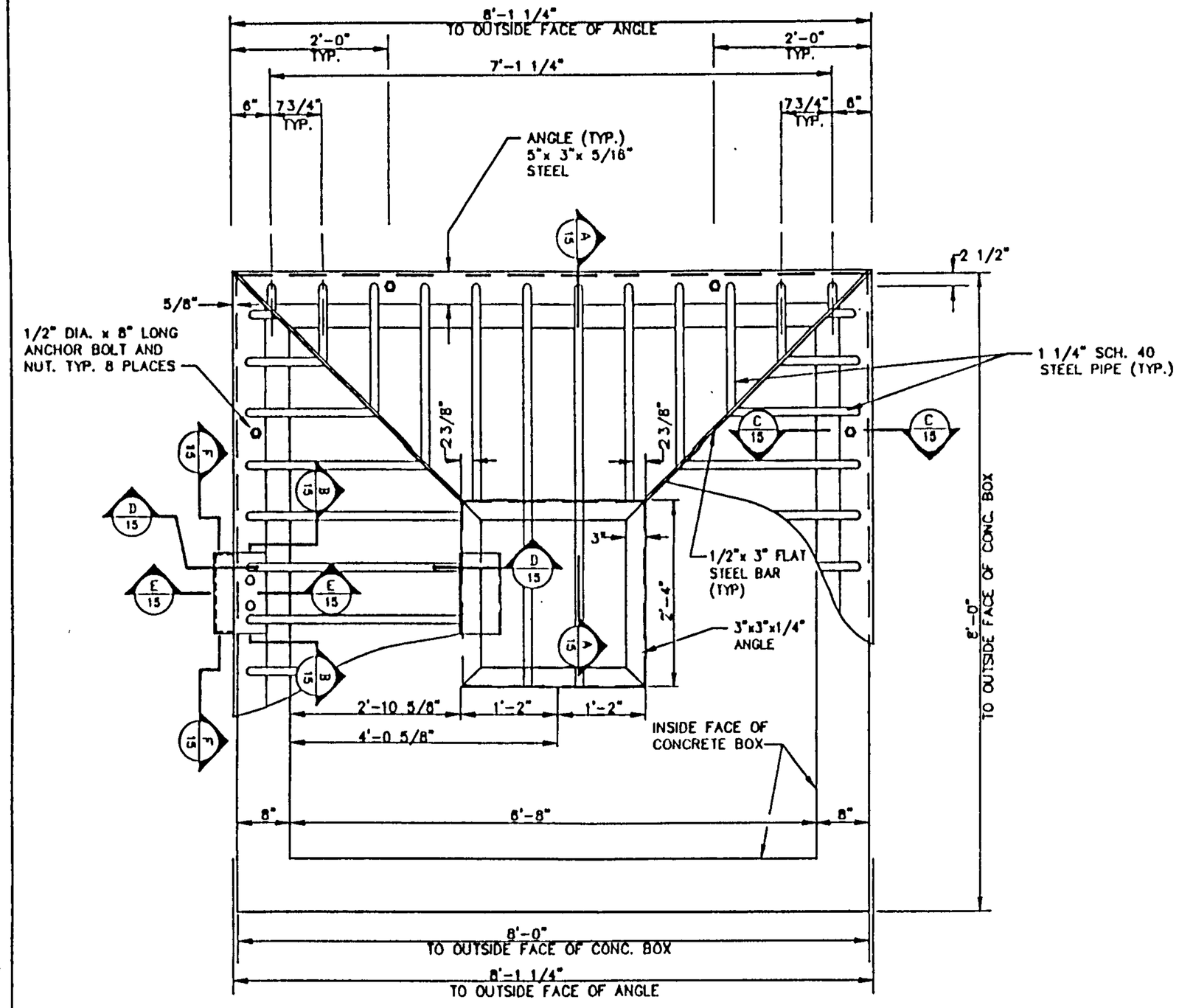
ALBUQUERQUE METROPOLITAN ARROYO FLOOD CONTROL AUTHORITY

TITLE: UNSER DIVERSION
OUTLET STRUCTURE
DETAILS AND SECTIONS

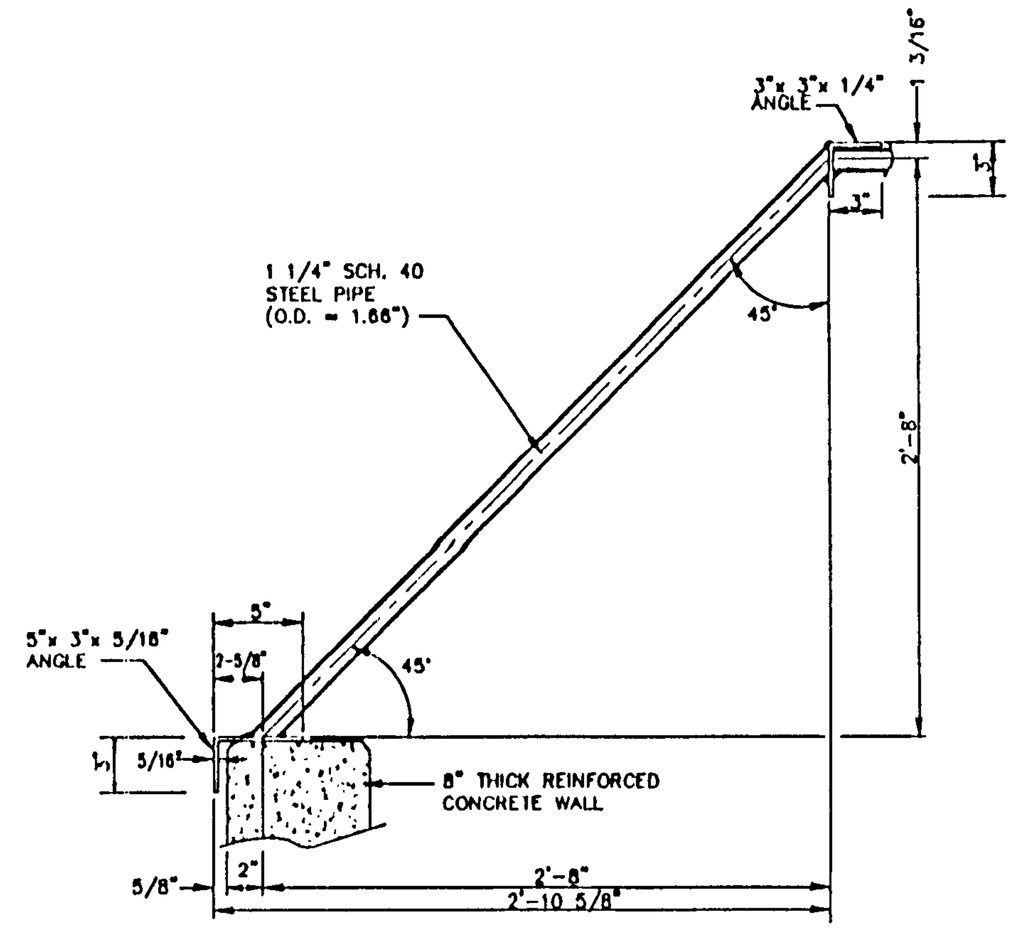
APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
AMAFCA					

PROJECT NO. 3324.0 | MAP NO. Z-K9 | SHEET 14 OF 25

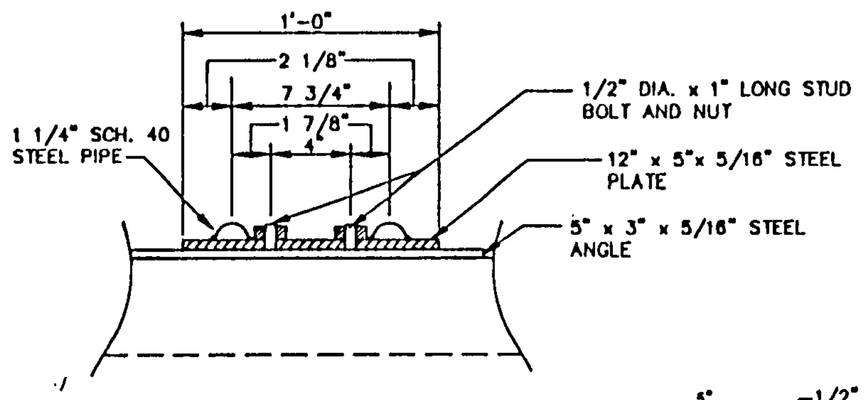
DWG 3324\133403
PAT 11-18-96 10:42:54



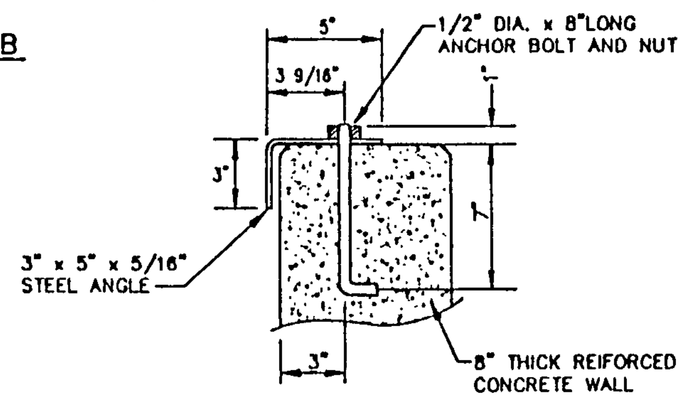
TRASH RACK PLAN
SCALE: 1"=1'



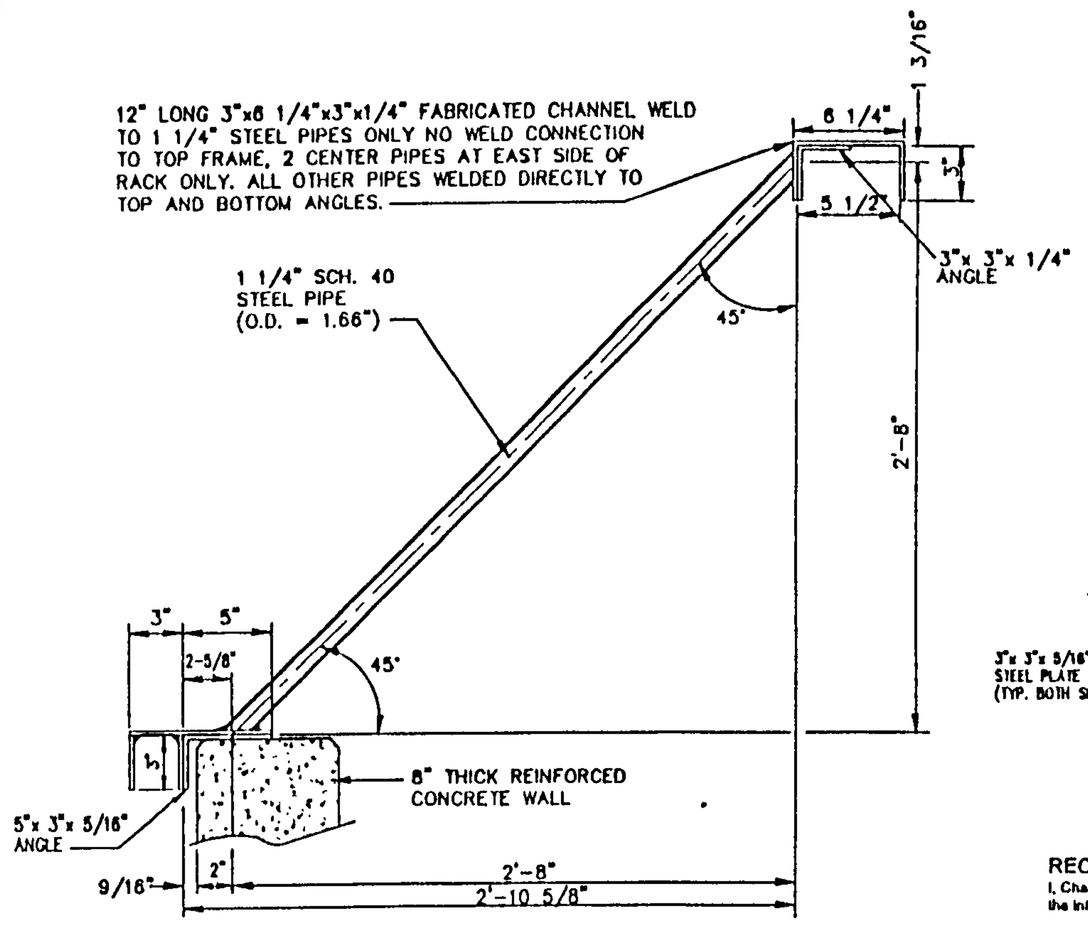
SECTION A-A
SCALE: 1"=1/2'



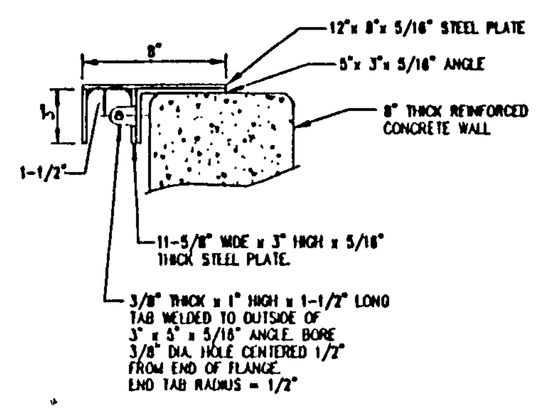
SECTION B-B
NOT TO SCALE



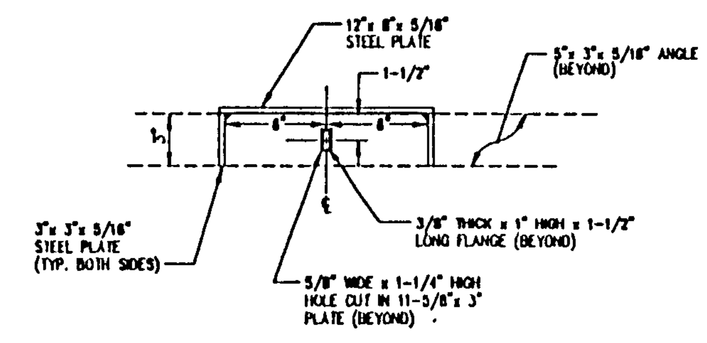
SECTION C-C
NOT TO SCALE



SECTION D-D
SCALE: 1"=1/2'



SECTION E-E
SCALE: 1"=1/2'



SECTION F-F
SCALE: 1"=1/2'

NOTES:

1. EXCEPT WHERE OTHERWISE NOTED, CONNECT ALL DIAGONAL PIPE MEMBERS TO TOP AND BOTTOM SUPPORTS WITH 1/8" FILLET WELD, ALL AROUND.
2. CONNECT 1/2"x 3" FLAT BAR TO TOP AND BOTTOM ANGLES WITH 5/16" FILLET WELD ON ALL SIDES.
3. EXCEPT AS OTHERWISE NOTED, CONNECT ALL ANGLES WITH FLUSH WELDS TO THE FULL MATERIAL THICKNESS.
4. AFTER CLEANING SURFACE OF SCALE, RUST, OIL ETC., PAINT ENTIRE TRASH RACK WITH TWO COATS OF RED OXIDE AND ONE FINISH COAT OF WELBORN MAPLE NUT BROWN PAINT.
5. THE TWO CENTER PIPE MEMBERS ON THE EAST SIDE OF THE RACK ARE DESIGNED TO BE REMOVABLE TO PROVIDE ACCESS TO THE INSIDE OF THE OUTLET STRUCTURE.
6. GRIND ALL EXPOSED SHARP CORNERS SMOOTH.

RECORD DRAWING

I, Charles M. Easterling, hereby certify that these drawings have been revised in accordance with the information furnished by Surv-Tek, Inc. to reflect the construction as actually accomplished.

Charles M. Easterling, P.E. — Date: 5-8-97
N.M.P.E. No. 6411

AS BUILT INFORMATION

BENCH MARKS

STATION NAME: 1-4C-20A
N.M.S.H.C. BRASS TABLET LOCATED ON THE NORTH SIDE OF I.S. HWY. 1-40 AND ABOUT 445' EAST OF UNSER BLVD.
OVERPASS

NORTHING: 1,496,199.7
EASTING: 365,926.16
ELEVATION: 5125.89

CONTRACTOR
WORK STAKED BY — DATE
WORK INSPECTED BY — DATE
FIELD VERIFICATION BY — DATE
DRAWINGS COMPILED BY — DATE

MICRO-FILM INFORMATION
RECORDED BY — DATE
NO.

SURVEY INFORMATION

FIELD NOTES

NO.	BY	DATE
TOPO	GEO SERVICE	1-93

ENGINEER'S SEAL

NO.	DATE	REMARKS	BY

REVISIONS

DESIGNED BY	VSF, JMJ	DATE 10/93
DRAWN BY	PMT, JMJ	DATE 10/93
CHECKED BY	VSF, DAE	DATE 9/94

EASTERLING & ASSOCIATES, INC.
CONSULTING ENGINEERS
10131 Coors Rd., NW, Suite H-7/8
ALBUQUERQUE, NEW MEXICO 87114
(505) 898-8021 FAX (505) 898-8501

ALBUQUERQUE METROPOLITAN ARROYO FLOOD CONTROL AUTHORITY

TITLE: UNSER DIVERSION
OUTLET STRUCTURE TRASH RACK
DETAILS AND SECTIONS

APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
AMAFCA					

PROJECT NO. 3324.0 | MAP NO. Z-K9 | SHEET 15 OF 25

RECORD DRAWING

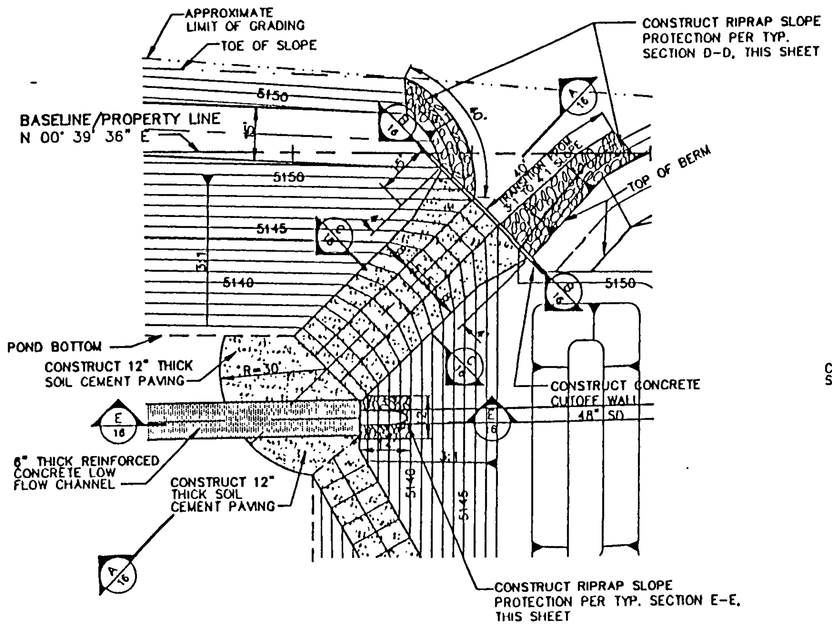
I, Charles M. Easterling, hereby certify that these drawings have been revised in accordance with the information furnished by Surv-Tek, Inc. to reflect the construction as actually accomplished

Charles M. Easterling, P.E. — Date 5-8-97

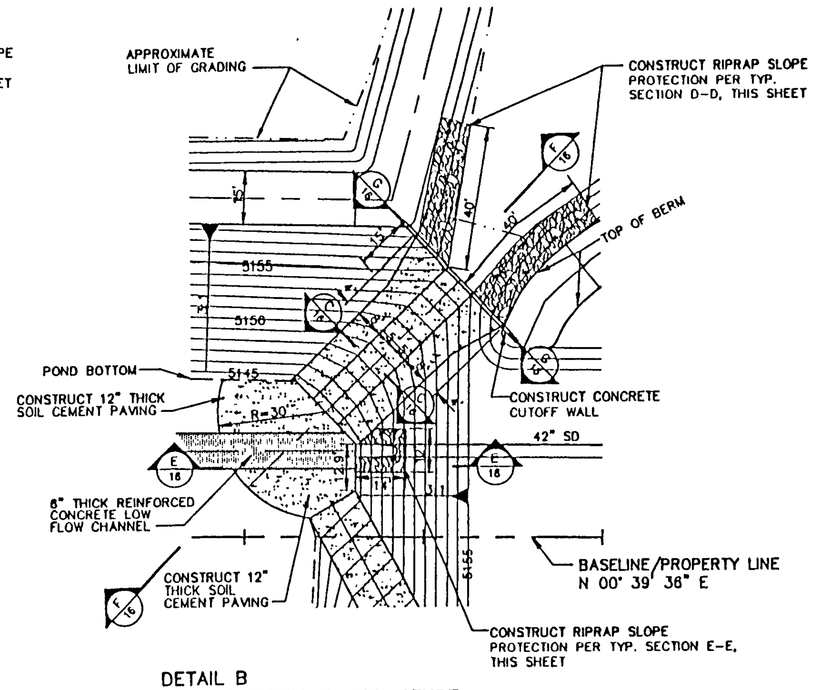
N.M.P.E. No. 6411

GRAPHIC SCALE

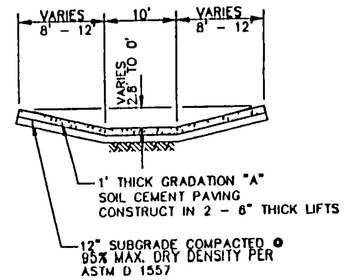
(IN FEET)
1 inch = 80 ft.



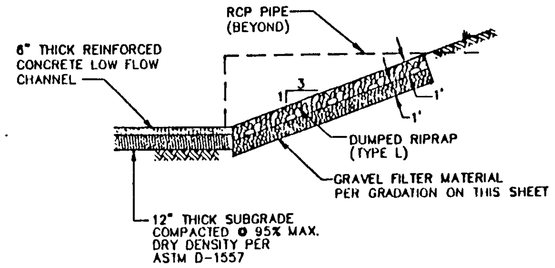
DETAIL A
POND 1 RUNDOWN STRUCTURE
SCALE: 1" = 20'



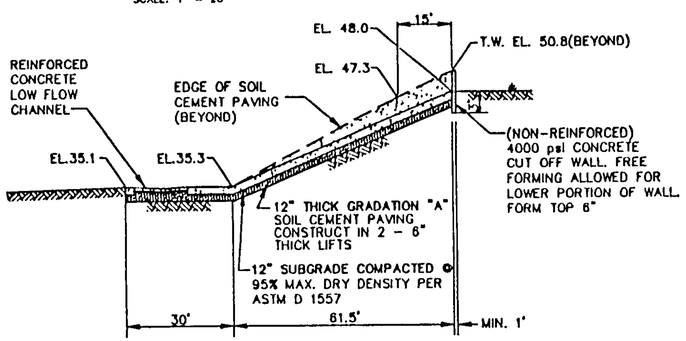
DETAIL B
POND 3 RUNDOWN STRUCTURE
SCALE: 1" = 20'



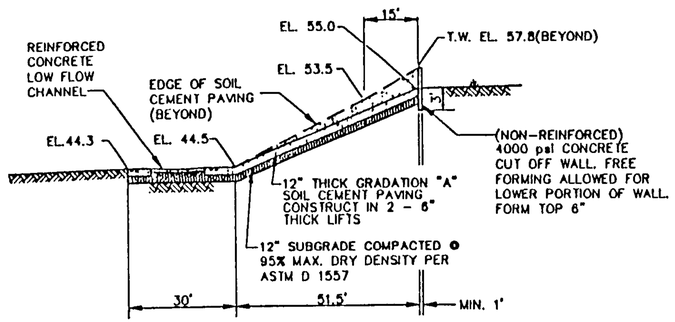
RUNDOWN STRUCTURE - SECTION C-C
SCALE: 1" = 10' HORIZ. 1" = 10' VERT.



RCP OUTLET - SLOPE PROTECTION - SECTION E-E
NOT TO SCALE

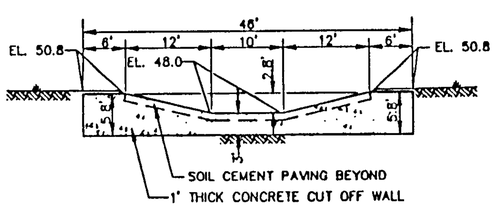


RUNDOWN STRUCTURE - SECTION A-A
SCALE: 1" = 20' HORIZ. 1" = 10' VERT.

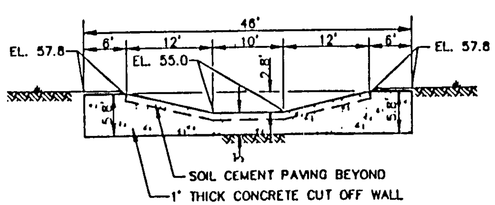


RUNDOWN STRUCTURE - SECTION F-F
SCALE: 1" = 20' HORIZ. 1" = 10' VERT.

TYPICAL RIPRAP SLOPE PROTECTION - SECTION D-D
NOT TO SCALE



RUNDOWN CONCRETE CUT OFF WALL - SECTION B-B
SCALE: 1" = 10' HORIZ. 1" = 10' VERT.



RUNDOWN CONCRETE CUT OFF WALL - SECTION G-G
SCALE: 1" = 10' HORIZ. 1" = 10' VERT.

GRAVEL MATERIAL GRADATION MATERIAL

SIEVE SIZE	% PASSING BY WEIGHT
3"	80-100
3/4"	45-65
#4	25-45
#40	0-20
#200	0-5

PIT RUN FILTER MATERIAL MEETING THE ABOVE GRADATION REQUIREMENTS MY BE USED WITHOUT SCREENING

AS BUILT INFORMATION
CONTRACTOR — DATE
WORK STAKED BY — DATE
AS-BUILT MAPS BY — DATE
FIELD VERIFICATION BY — DATE
DRAWINGS CORRECTED BY
MICRO-FILM INFORMATION
RECORDED BY — DATE
NO.

BENCH MARKS
STATION NAME: I-40-20A
N.M.S.H.C. BRASS TABLET LOCATED ON THE NORTH SIDE OF U.S. HWY. I-40 AND ABOUT 465' EAST OF UNSER BLVD. OVERPASS
NORTHING: 1,490,199.97
EASTING: 365,926.16
ELEVATION: 5165.89

SURVEY INFORMATION
FIELD NOTES

NO.	BY	DATE
TOPO	GED SERVICE	4-93

ENGINEER'S SEAL

NO.	DATE	REMARKS	BY
		REVISIONS	
		DESIGN	
		DESIGNED BY VSF	DATE 10/93
		DRAWN BY PMT,JMN	DATE 10/93
		CHECKED BY VSF,DME	DATE 9/94

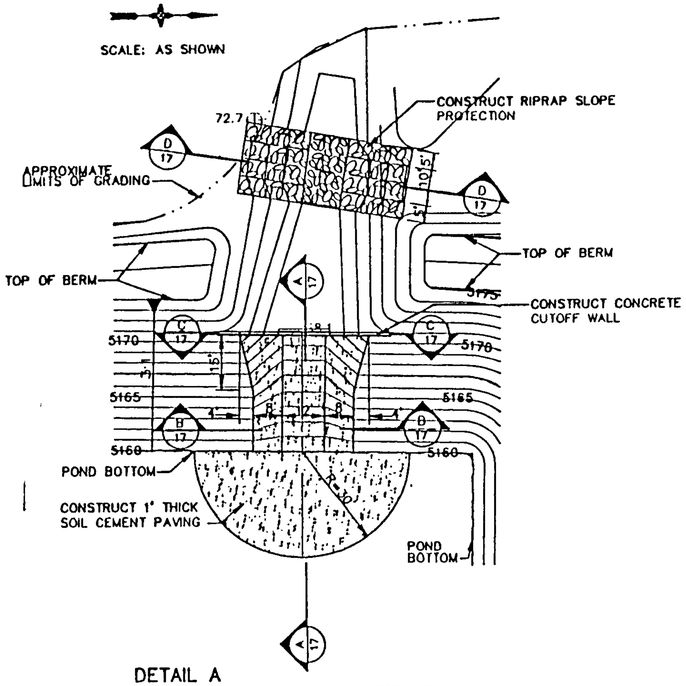
EASTERLING & ASSOCIATES, INC.
CONSULTING ENGINEERS
10131 Coors Rd., NW, Suite H-7/8
ALBUQUERQUE, NEW MEXICO 87114
(505) 898-8021 FAX (505) 898-8501

ALBUQUERQUE METROPOLITAN ARROYO FLOOD CONTROL AUTHORITY

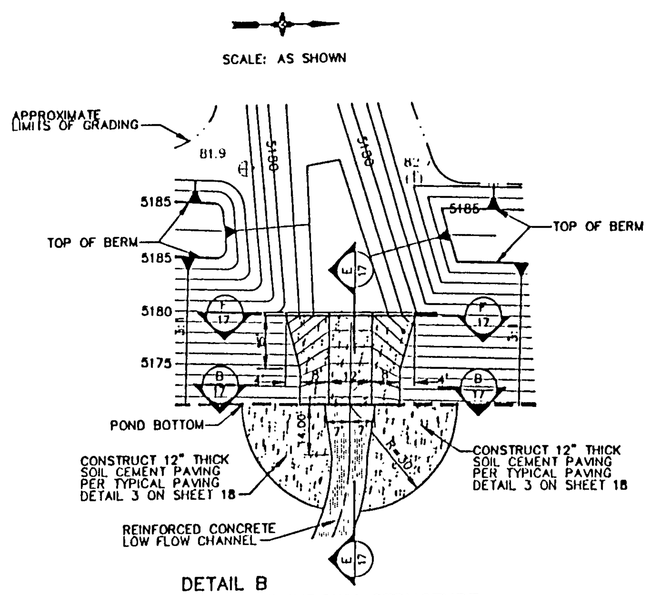
TITLE: UNSER DIVERSION
RUNDOWN STRUCTURE DETAILS AND SECTIONS
POND 1 AND POND 3

APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
AMAFCA					

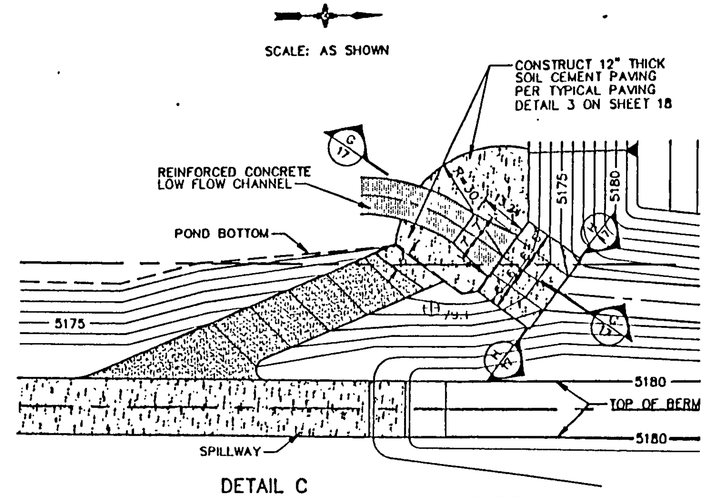
PROJECT NO. 3324.0 | MAP NO. Z-K9 | SHEET 16 OF 25



DETAIL A
POND 5 RUNDOWN STRUCTURE
SCALE: 1" = 20'

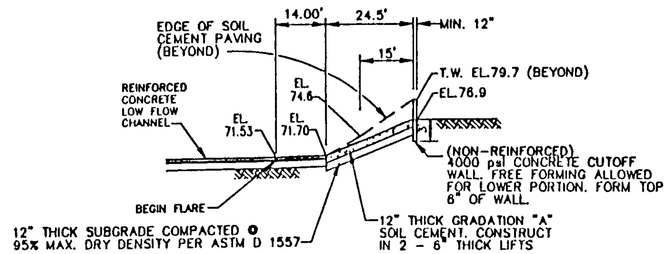


DETAIL B
POND 6 RUNDOWN STRUCTURE
SCALE: 1" = 20'

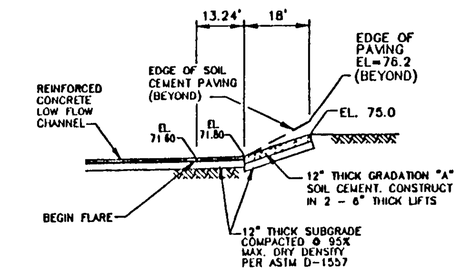


DETAIL C
POND 6 RUNDOWN STRUCTURE
SCALE: 1" = 20'

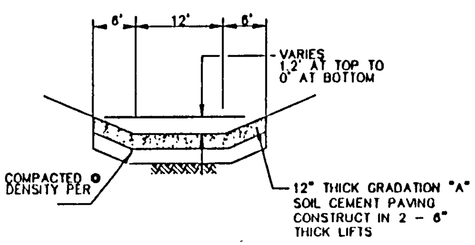
RUNDOWN STRUCTURE - SECTION A-A
SCALE: 1" = 20' HORIZ.
1" = 10' VERT.



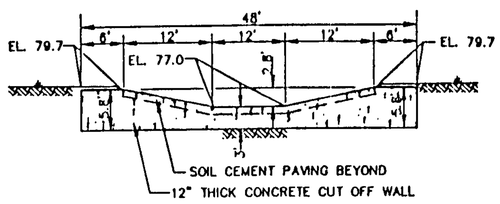
RUNDOWN STRUCTURE - SECTION E-E
SCALE: 1" = 20' HORIZ.
1" = 10' VERT



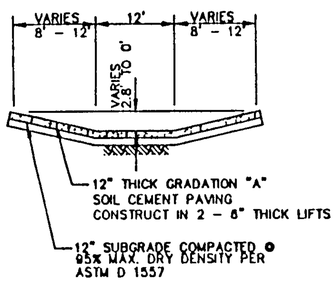
RUNDOWN STRUCTURE - SECTION G-G
SCALE. 1" = 20' HORIZ.
1" = 10' VERT.



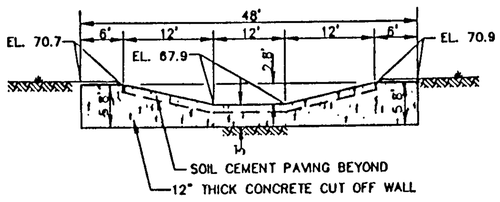
RUNDOWN STRUCTURE - SECTION H-H
SCALE: 1" = 10' HORIZ.
1" = 5' VERT.



RUNDOWN CONCRETE CUT OFF WALL - SECTION F-F
SCALE: 1" = 10' HORIZ.
1" = 10' VERT



RUNDOWN STRUCTURE - SECTION B-B
SCALE: 1" = 10' HORIZ.
1" = 10' VERT.



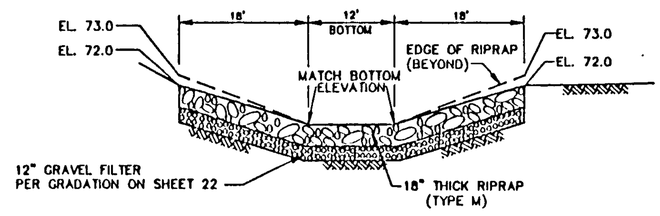
RUNDOWN CONCRETE CUT OFF WALL - SECTION C-C
SCALE: 1" = 10' HORIZ.
1" = 10' VERT.

RECORD DRAWING

I, Charles M. Easterling, hereby certify that these drawings have been revised in accordance with the information furnished by Surv-Tek, Inc. to reflect the construction as actually accomplished

Charles M. Easterling, P.E.
N.M.P.E. No. 6411

5-8-97
Date



RIPRAP - SECTION D-D
SCALE : 1" = 10' HORIZ
1" = 5' VERT.

AS BUILT INFORMATION
CONTRACTOR

WORK STARTED BY	DATE
WORK ACCEPTED BY	DATE
FIELD VERIFICATION BY	DATE
DRAWINGS CORRECTED BY	DATE

MICRO-FILM INFORMATION
RECORDED BY DATE
NO.

BENCH MARKS

STATION NAME: I-40-20A	
N.M.S.H.C. BRASS TABLET LOCATED ON THE NORTH SIDE OF U.S. HWY. I-40 AND ABOUT 465' EAST OF UNSER BLVD. OVERPASS	DATE 4-93

SURVEY INFORMATION
FIELD NOTES

NO.	BY
TOPO	GEO SERVICE

NORTHING: 1,490,198.97
EASTING: 345,926.16
ELEVATION: 5165.89

ENGINEER'S SEAL
CHARLES M. EASTERLING
NEW MEXICO
6411
REGISTERED PROFESSIONAL ENGINEER
9-2-96

NO.	DATE	REMARKS	BY
		REVISIONS	

DESIGN

		DATE
DESIGNED BY	VSF	10/93
DRAWN BY	PWT,JMM	10/93
CHECKED BY	VSF,CME	9/94

EASTERLING & ASSOCIATES, INC.
CONSULTING ENGINEERS
10131 Coors Rd., NW, Suite H-7/8
ALBUQUERQUE, NEW MEXICO 87114
(505) 898-8021 FAX (505) 898-8501

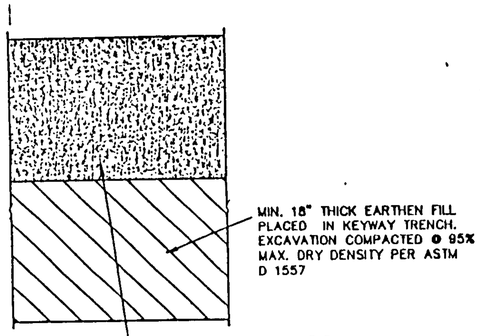
ALBUQUERQUE METROPOLITAN ARROYO FLOOD CONTROL AUTHORITY

TITLE: UNSER DIVERSION
RUNDOWN STRUCTURE DETAILS AND SECTIONS
POND 5 AND POND 6

APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
AMAFCA					

PROJECT NO. 3324.0 | MAP NO. Z-K9 | SHEET 17 OF 25

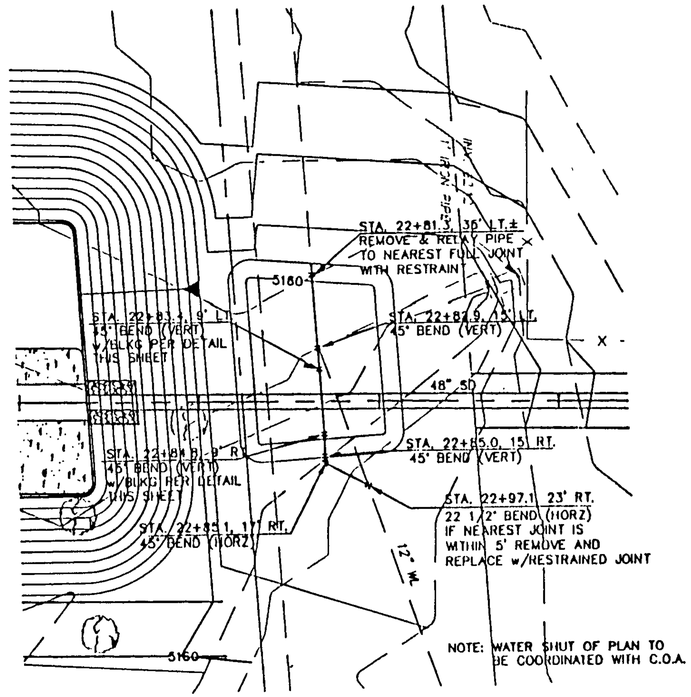
DWG F:\PROJECTS\TEMP\DRC\3324\PRO02
TIME 11-18-96 13:35:56



NOTE: KEYWAY TRENCH DEPTH UNDER SPILLWAY PAVING SHALL BE THE GREATER OF 3' BELOW TOP OF SPILLWAY PAVING OR 3' BELOW EXISTING GROUND @ CENTERLINE OF THE SPILLWAY PAVING.

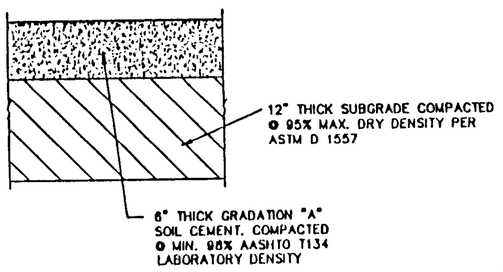
TYPICAL PAVING DETAIL – 1

NOT TO SCALE



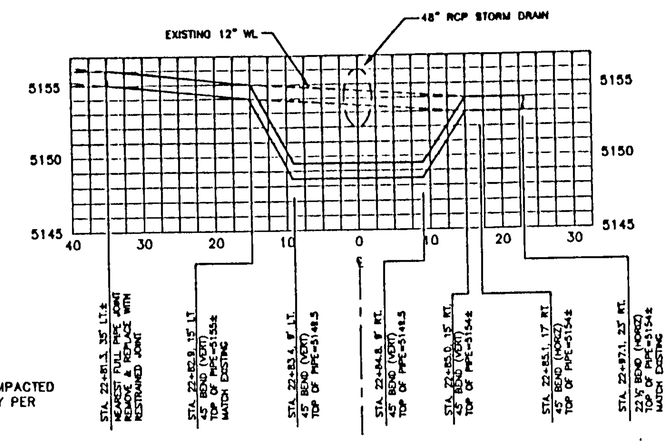
12" WATERLINE RELOCATION DETAIL

1"=20'



TYPICAL PAVING DETAIL – 2

NOT TO SCALE

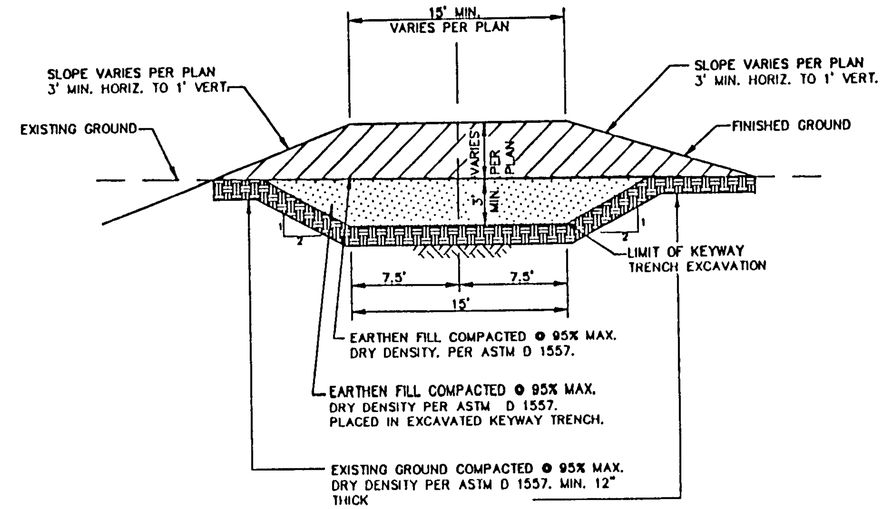


12" WATERLINE VERTICAL RELOCATION DETAIL

1"=10' (H)
1"=5' (V)

NOTES:

1. USE RESTRAINT ON ALL PIPE JOINTS & FITTINGS
2. THIS WORK IS ALL PAID FOR UNDER ITEM NO. 27 AND SHALL INCLUDE ALL TRENCHING, PIPE, FITTINGS, BACKFILL, SHUTOFFS, BLOCKING, TESTING NECESSARY FOR THE RELOCATION
3. ALL BACKFILL @ 95% ASTM-1557



NOTE; REMOVE AND DISPOSE OF ALL ORGANIC MATERIAL, DEBRIS AND LARGE STONES PRIOR TO PLACING FILL MATERIAL.

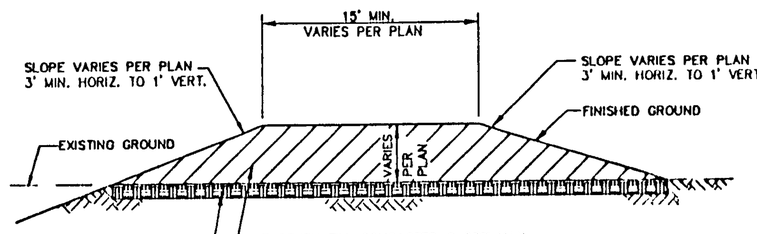
TYPICAL BERM W/ STRUCTURAL KEYWAY SECTION

NOT TO SCALE

RECORD DRAWING

I, Charles M Eastlerling, hereby certify that these drawings have been revised in accordance with the information furnished by Bury-Talk, Inc. to reflect the construction as actually accomplished

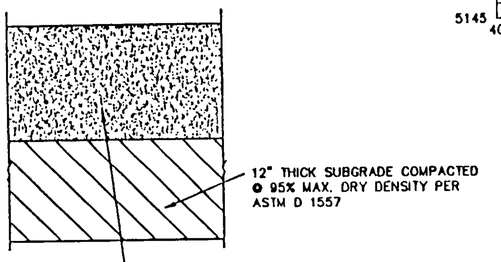
Charles M Eastlerling, P.E. — Date 5-8-97
N.M.P.E. No 6411



NOTE: REMOVE AND DISPOSE OF ALL ORGANIC MATERIAL, DEBRIS AND LARGE STONES PRIOR TO PLACING FILL MATERIAL.

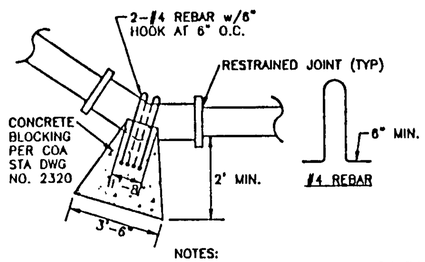
TYPICAL BERM W/O STRUCTURAL KEYWAY SECTION

NOT TO SCALE



TYPICAL PAVING DETAIL – 3

NOT TO SCALE

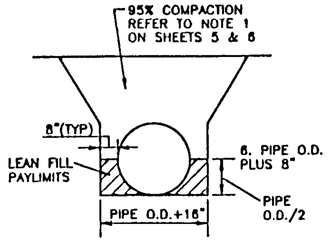


NOTES:

1. COVER FITTINGS AND PIPE WITH 4 MIL PLASTIC SHEETING, EXTEND SHEETING 12" BEYOND EDGE OF CONCRETE.

LOWER VERTICAL BEND BLOCKING DETAIL

NOT TO SCALE



LEAN FILL LIMITS

NOT TO SCALE

SCALE: AS SHOWN

EASTERLING & ASSOCIATES, INC.
CONSULTING ENGINEERS
10131 Coors Rd., NW, Suite H-7/8
ALBUQUERQUE, NEW MEXICO 87114
(505) 898-8021 FAX (505) 898-8501

AS BUILT INFORMATION — CONTRACTOR — DATE — STAKED BY — INSPECTOR'S FIELD NOTES — DATE — VERIFICATION BY — DATE — CORRECTED BY — MICRO-FILM INFORMATION — RECORDED BY — DATE — NO.

BENCH MARKS

SURVEY INFORMATION — FIELD NOTES — NO. — BY — DATE

ENGINEERS SEAL

NO.	DATE	REMARKS	BY
		REVISIONS	
		DESIGN	

DESIGNED BY VSF DATE 10/93
DRAWN BY ALM,PWT,JMW DATE 10/93
CHECKED BY VSF,PWT DATE 9/94

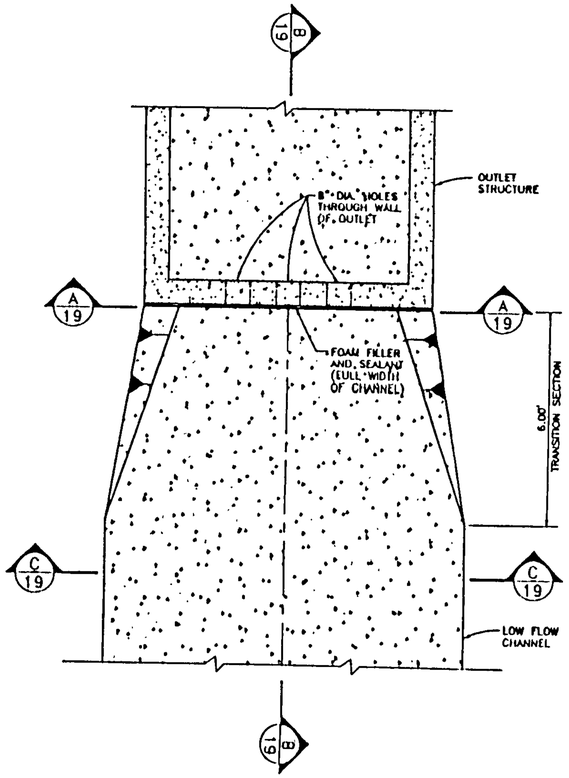
ALBUQUERQUE METROPOLITAN ARROYO FLOOD CONTROL AUTHORITY

TITLE: UNSER DIVERSION

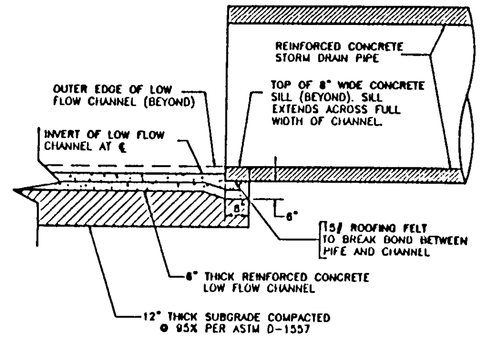
MISCELLANEOUS DETAILS AND SECTIONS

APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
AMAFCA					

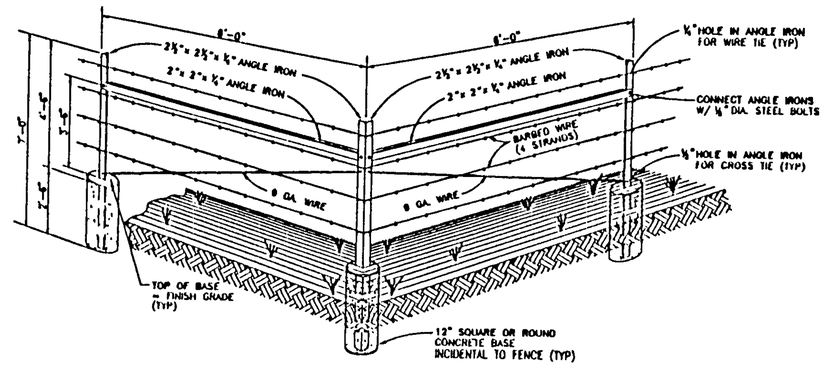
PROJECT NO. 3324.0 | MAP NO. Z-K9 | SHEET 18 OF 25



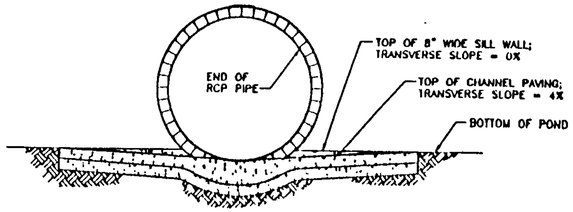
LOW FLOW CHANNEL @ OUTLETS – PLAN
SCALE: 1"=2'



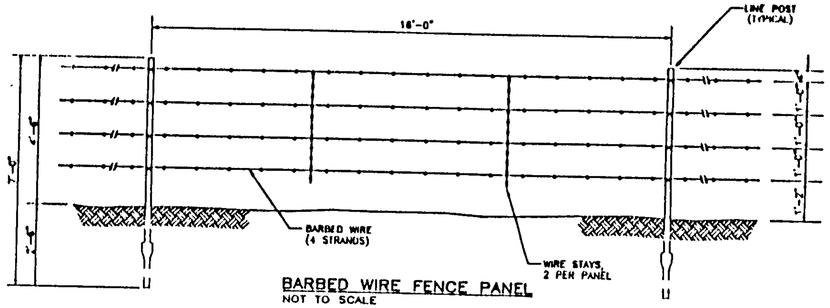
℄ LOW FLOW CHANNEL @ INLET PIPE – SECTION
SCALE: 1"=2'



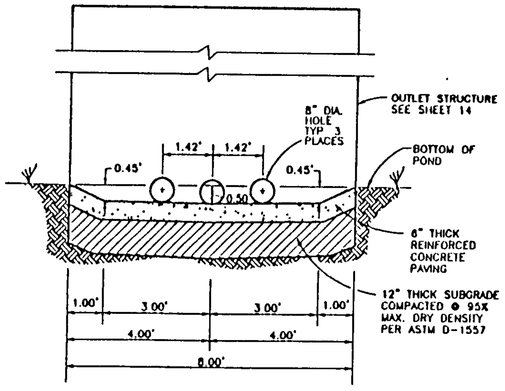
FENCE CORNER PANEL
NOT TO SCALE



LOW FLOW CHANNEL
@ END OF INLET PIPE
–TRANSVERSE SECTION–
SCALE: 1"=2'



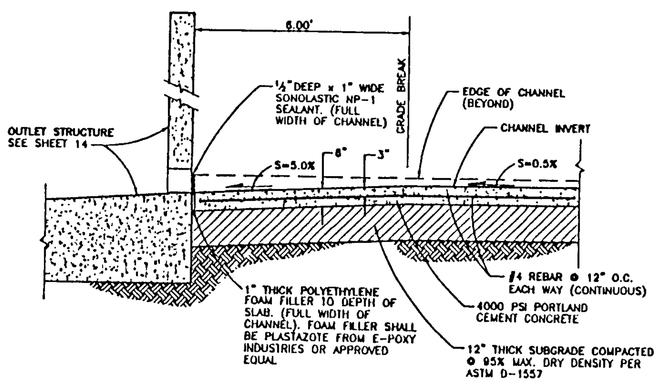
BARBED WIRE FENCE PANEL
NOT TO SCALE



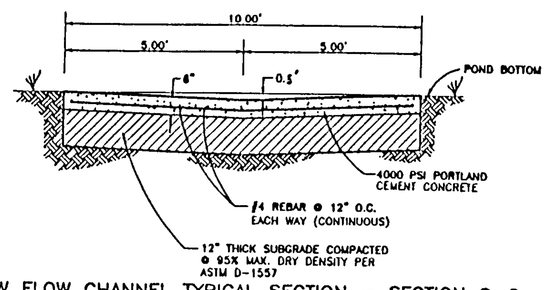
LOW FLOW CHANNEL – SECTION A–A
SCALE: 1"=2'

RECORD DRAWING
I, Charles M. Easterling, hereby certify that these drawings have been revised in accordance with the information furnished by Surv-Tek, Inc. to reflect the construction as actually accomplished

Charles M. Easterling, P.E. 5-8-97
N.M.P.E. No. 6411 Date

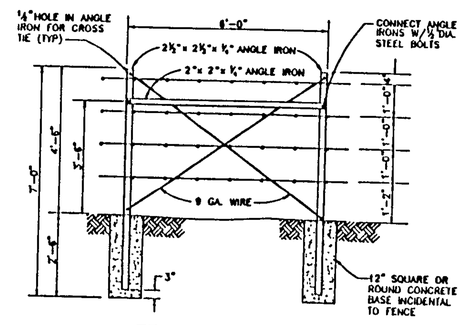


LOW FLOW CHANNEL @ OUTLET STRUCTURE – SECTION B–B
SCALE: 1"=2'



LOW FLOW CHANNEL TYPICAL SECTION – SECTION C–C
SCALE: 1"=2'

LOW FLOW CHANNEL



FENCE PULL PANEL
NOT TO SCALE

FENCE

FENCE NOTES

1. PULL PANELS SHALL BE CONSTRUCTED AT THE MIDPOINT OF FENCE RUNS LONGER THAN 990 FT.
2. PULL PANELS SHALL BE CONSTRUCTED AT BOTH SIDES OF PIPE GATE OPENINGS. THE EXACT LOCATION OF PIPE GATE OPENINGS WILL BE DETERMINED BY THE ENGINEER IN THE FIELD AT THE TIME OF CONSTRUCTION.

EASTERLING & ASSOCIATES, INC.
CONSULTING ENGINEERS
10131 Coors Rd., NW, Suite H-7/8
ALBUQUERQUE, NEW MEXICO 87114
(505) 898-8021 FAX (505) 898-8501

ALBUQUERQUE METROPOLITAN ARROYO FLOOD CONTROL AUTHORITY

TITLE: UNSER DIVERSION
LOW FLOW CHANNEL AND FENCE DETAILS AND SECTIONS

APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
AMAFCA					

PROJECT NO. 3324.0 | MAP NO. Z-K9 | SHEET 19 OF 25

AS BUILT INFORMATION
CONTRACTOR | DATE
PROJECT INSPECTOR BY | DATE
INSPECTOR'S FIELD NOTES BY | DATE
INSPECTION BY | DATE
CORRECTED BY
MICRO-FILM INFORMATION
RECORDED BY | DATE
NO.

BENCH MARKS
STATION NAME: I-40-20A
N.M.S.H.C. BRASS TABLET LOCATED ON THE NORTH SIDE OF I-40 AND ABOUT 445' EAST OF UNSER BLVD.
U.S. HWY. I-40 AND ABOUT 445' EAST OF UNSER BLVD.
OVERPASS
NORTHING: 1,490,199.7
EASTING: 345,926.16
ELEVATION: 5165.89

SURVEY INFORMATION
FIELD NOTES

NO.	BY	DATE
TOPO	GEO SERVICE	I-83

ENGINEER'S SEAL

NO.	DATE	REMARKS	BY
		REVISIONS	

DESIGNED BY VSF, JML DATE 10/93
DRAWN BY PMT, JMN DATE 10/93
CHECKED BY VSF, CME DATE 9/94

96020106

RIGHT OF WAY MAP
UNSER DIVERSION CHANNEL CORRIDOR

(BEING A REPLAT OF A PORTION OF ATRISCO BUSINESS PARK, UNIT 2; A PORTION OF TOWN OF ATRISCO GRANT, UNIT 5; AND AN UNPLATTED PARCEL OF LAND)

TOWN OF ATRISCO GRANT
CITY OF ALBUQUERQUE
BERNALILLO COUNTY, NEW MEXICO

SEPTEMBER , 1995

Vicinity Map
N.T.S.

Reserved for County Clerk Seal

3:25 p 96
77

S-95-46

APPROVALS

Traffic Engineer, City of Albuquerque Public Works Department — Date 11-6-95

City Surveyor, City of Albuquerque Public Works Department — Date 11/15/95

Utility Development Division, City of Albuquerque Public Works Department — Date 12-12-95

Albuquerque Metropolitan Arroyo Flood Control Authority — Date 12-12-95

City Engineer, City of Albuquerque Public Works Department — Date 12-14-95

Property Management, City of Albuquerque — Date 12-14-95

Parks and General Services, City of Albuquerque — Date 12-12-95

APPROVAL as specified by the Albuquerque Subdivision Ordinance.

Chairman, Albuquerque/Bernalillo County Development Review Board — Date 2-21-96

DRB NO. 95-314
V-95-111

GENERAL NOTES

1. Bearings are grid based upon the New Mexico State Plane Coordinate System, Central Zone (NAD 27) and related to grid at the Albuquerque Control Survey Monument "1-J8".
2. Distances are ground.
3. All corners are a 5/8" rebar and surveycap stamped "HUGG LS 5823" unless otherwise indicated.
4. Bearings and Distances shown in parenthesis ( ) are record.
5. Zone Atlas Pages J-8, J-10, K-9 and K-10.
6. U.C.L.S. Log Number 950209164503 90

DISCLOSURE STATEMENT

The purpose of the Right of Way Map is to dedicate to the City of Albuquerque in fee simple the various street right of way parcels shown hereon; to create Tracts T-2, T-3, T-4, T-5, J-2, J-3, B-8B, Lot 2-A1 and 2-A2 for the future conveyance to Albuquerque Metropolitan Arroyo Flood Control Authority (AMAFCA) for drainage control purposes in connection with the Unser Diversion Channel Project pursuant to Agreement for Atrisco Business Park Storm Water Improvements dated July 16, 1993 and recorded August 23, 1993 in Bk. 93-23 at pg.s 3090-3110 as Doc # 93-093160 Records of Bernalillo County Clerk, Bernalillo County, New Mexico; to grant the public utility easements shown hereon; to show the 7' public utility easement and that portion of a 50' drainage easement vacated by V-95-111 ; and to replat the remainders of the lots and tracts in conformance with the Albuquerque Subdivision Ordinance.

NOTE

Prior to development, City of Albuquerque Water and Sanitary Sewer Service to this property must be verified and coordinated with the Public Works Department, City of Albuquerque, via a request for a water and sewer availability statement.

PUBLIC UTILITY EASEMENTS

PUBLIC UTILITY EASEMENTS shown on this plat are granted for the common and joint use of:

A. The Public Service Company of New Mexico for installation, maintenance, and service of overhead and underground electrical lines, transformers, and other equipment and related facilities reasonably necessary to provide electrical service.

B. The Gas Company of New Mexico for installation, maintenance, and service of natural gas lines, valves and other equipment and facilities reasonably necessary to provide natural gas.

C. U.S. West Communications for the installation, maintenance, and service of such lines, cable, and other related equipment and facilities reasonably necessary to provide communication services, including but not limited to ground pedestals and closures.

D. Jones Intercable for the installation, maintenance, and service of such lines, cable, and other related equipment and facilities reasonably necessary to provide Cable TV service.

Included, is the right to build, rebuild, construct, reconstruct, locate, relocate, change, remove, modify, renew, operate, and maintain facilities for the purposes described above, together with free access to, from, and over said easements, including sufficient working area space for electric transformers, with the right and privilege to trim and remove trees, shrubs or bushes which interfere with the purposes set forth herein. No building, sign, pool (aboveground or subsurface), hot tub, concrete or wood pool decking, or other structure shall be erected or constructed on said easements, nor shall any well be drilled or operated thereon. Property owners shall be solely responsible for correcting any violations of National Electrical Safety Code by construction of pools, decking, or any structures adjacent to or near easements shown on this plat.

Approving this plat, PNM Electric Services and Gas Services (PNM) did not conduct a Title Search of the properties shown hereon. Consequently, PNM does not waive nor release any easement or easement rights which may have been granted by prior plat, recital, or other document which are not shown on this plat.

APPROVALS

Gas Company of New Mexico — Date 10-10-95

Public Service Company of New Mexico — Date 10-10-95

U. S. West Communications — Date 10-10-95

Jones Intercable — Date 11-8-95

SURVEYORS CERTIFICATION

I, Garry P. Hugg, New Mexico Professional Surveyor Number 5823, hereby certify that this plat of survey was prepared from field notes of an actual ground survey performed by me or under my supervision; that it meets the Standards for Land Surveys in New Mexico as adopted by the New Mexico State Board of Registration for Professional Engineers and Professional Surveyors; that it meets the minimum requirements for surveys and monumentation of the Albuquerque Subdivision Ordinance; that it shows all easements of record; and that it is true and correct to the best of my knowledge and belief.

Garry P. Hugg
NMPS No. 5823
September 27, 1995

PROFESSIONAL SURVEYOR — STATE OF NEW MEXICO — No. 5823 — GARRY P. HUGG

SHEET 1 OF 12

SURVTEK, INC.
Consulting Surveyors
8643 Paradise Blvd. N.E. Albuquerque, New Mexico 87114
Phone 505-897-3068
Fax 505-897-3077

940172ST

96020106

RIGHT OF WAY MAP
UNSER DIVERSION CHANNEL CORRIDOR

(BEING A REPLAT OF A PORTION OF ATRISCO BUSINESS PARK, UNIT 2; A PORTION OF TOWN OF ATRISCO GRANT, UNIT 5; AND AN UNPLATTED PARCEL OF LAND)

TOWN OF ATRISCO GRANT
CITY OF ALBUQUERQUE
BERNALILLO COUNTY, NEW MEXICO

SEPTEMBER , 1995

Reserved for County Clerk Seal

3:25 p 96
77

LEGAL DESCRIPTION

That certain parcel of land situate within the Town of Atrisco Grant in projected Sections 16, 21 and 22, Township 10 North, Range 2 East, New Mexico Principal Meridian, City of Albuquerque, Bernalillo County, New Mexico comprising: all of Tracts T and J, Atrisco Business Park, Unit 2, as the same is shown and designated on the plat entitled "UNIT NO.2, ATRISCO BUSINESS PARK, ALBUQUERQUE, NEW MEXICO" filed in the office of the County Clerk of Bernalillo County, New Mexico on June 14, 1973 in Volume D5, folio 157; all of Tract B-8 and a portion of Tract B-14, Town of Atrisco Grant, Unit 5, as the same is shown and designated on the plat entitled "PLAT SHOWING A PORTION OF TRACTS ALLOTTED FROM TOWN OF ATRISCO GRANT IN SCHOOL DISTRICT 28, BERNALILLO COUNTY-NEW MEXICO" filed in the office of the County Clerk of Bernalillo County, New Mexico on December 5, 1944 in Volume D, folio 117; all of Lot 2, Atrisco Business Park, Unit 2, as the same is shown and designated on the plat entitled "SUMMARY PLAT OF TRACTS H-1, H-2, I-1 & I-2 OF UNIT 2, ATRISCO BUSINESS PARK" filed in the office of the County Clerk of Bernalillo County, New Mexico on August 30, 1979 in Volume C15, folio 100 and an unplatted parcel of land bounded on the North by Interstate 40 (Coronado Freeway), on the South by Arvisu Road, on the East by Atrisco Business Park, Unit 2 and on the West by the Town of Atrisco Grant, Unit 5, being more particularly described by survey performed by Garry P. Hugg, New Mexico Professional Surveyor Number 5823 using New Mexico State Plane Coordinate System, Central Zone (NAD 27) grid bearings and ground distances as follows:

BEGINNING at a Northwesterly corner of the parcel herein described, (a New Mexico State Highway Commission right of way monument found set in concrete), said point being a point on the Southerly right of way line of Interstate 40 (Coronado Freeway) as shown on the New Mexico State Highway Commission Right of Way Map New Mexico Project Sheet No. I-040-3(28)148 (revised May 4, 1971) and the Northwest corner of said Tract T, Atrisco Business Park, Unit 2, said point also being the Northeast corner of said unplatted parcel of land, whence (1) the New Mexico State Highway Commission /Albuquerque City Survey Monument "1-J8" bears N 27° 18' 35" E, 1720.86 feet distant and (2) the Albuquerque City Survey Monument "10-K10" bears S 45° 17' 10" E, 2126.17 feet distant; Thence Southeasterly along the Southerly right of way and access control line of said Interstate 40 (Coronado Freeway) for the following four (4) courses:

S 85° 09' 54" E, 288.82 feet to a point of curvature (a New Mexico State Highway Commission right of way monument found set in concrete); Thence,

Southeasterly, 723.31 feet on the arc of a curve to the right (said curve having a radius of 6722.78 feet, a central angle of 07° 27' 53" and a chord which bears S 51° 26' 50" E, 691.88 feet) to a point of reverse curvature (a New Mexico State Highway Commission right of way monument found set in concrete); Thence,

Southeasterly, 796.30 feet on the arc of a curve to the left (said curve having a radius of 4415.20 feet, a central angle of 10° 20' 01" and a chord which bears S 22° 51' 41" E, 795.22 feet) to a point on curve (a New Mexico State Highway Commission right of way monument found set in concrete); Thence,

S 41° 25' 57" E, 44.81 feet to a point (a New Mexico State Highway Commission right of way monument found set in concrete) said point being a point of intersection of said Southerly right of way and access control line of Interstate 40 with the Westerly right of way line of Unser Boulevard N.W.; Thence,

S 30° 01' 49" E, 332.53 feet along said Westerly right of way line of Unser Boulevard N.W. to a point of intersection of said Unser Boulevard N.W. with the Northerly right of way line of Los Volcanes Road N.W. (a 5/8" rebar and cap stamped "L.S. 5823" set); Thence Southwesterly along said Northerly right of way line of Los Volcanes Road N.W. for the following three (3) courses,

S 59° 57' 15" W, 132.85 feet to a point of curvature (a 5/8" rebar and cap stamped "L.S. 6126" found in place); Thence,

Southwesterly, 1036.07 feet along the arc of a curve to the right (said curve having a radius of 2258.83 feet, a central angle of 26° 16' 07" and a chord which bears S 73° 05' 22" W, 1027.22 feet) to a point of tangency (a 5/8" rebar and cap stamped "L.S. 6126" found in place); Thence,

S 86° 13' 26" W, 258.49 feet to the Southwest corner of said Tract T and a point on the Westerly boundary of said Atrisco Business Park, Unit 2 (a 5/8" rebar and cap stamped "L.S. 5823" set); Thence,

S 00° 38' 36" W, 64.19 feet along a line common to the Westerly boundary of said Atrisco Business Park, Unit 2 and the Easterly boundary of said unplatted parcel of land to the Northwest corner of said Tract J, a point on the Southerly right of way line of said Los Volcanes Road N.W. (a 5/8" rebar and cap stamped "L.S. 5823" set); Thence Northeasterly along said Southerly right of way of Los Volcanes Road N.W. for the following three (3) courses,

N 86° 13' 26" E, 263.46 feet to a point of curvature (a 5/8" rebar and cap stamped "L.S. 7430" found in place); Thence,

Northeasterly, 1065.41 feet on the arc of a curve to the left (said curve having a radius 2323.83 feet, a central angle of 26° 16' 07" and a chord which bears N 73° 05' 22" E, 1056.11 feet) to a point of tangency (a 5/8" rebar and cap stamped "L.S. 7430" found in place); Thence,

N 59° 57' 15" E, 32.79 feet to the Northeast corner of said Tract J and the Northwest corner of Tract K-1, Atrisco Business Park, Unit 2 as the same is shown and designated on the plat entitled "REPLAT OF PARCEL "A", TRACTS G, AN UNNAMED TRACT, K, L & PORTIONS OF BLUEWATER ROAD, N.W. & UNSER BLVD., N.W., UNIT NO. 2, ATRISCO BUSINESS PARK TO PARCEL "A-1", TRACTS G-1, H-2-A, K-1, L-1, PORTIONS OF BLUEWATER ROAD, N.W., UNSER BLVD., N.W., AND ADDITIONAL RIGHT-OF-WAY FOR UNSER BLVD., UNIT NO. 2, ATRISCO BUSINESS PARK, within THE TOWN OF ATRISCO GRANT" filed in the office of the County Clerk of Bernalillo County, New Mexico on August 3, 1982 in Volume C20, folio 9 (a 5/8" rebar and cap stamped "L.S. 5823" set); Thence, Southeasterly along a line common to said Tracts J and K-1 for the following two (2) courses,

S 30° 03' 31" E, 969.07 feet to a point of curvature (a 5/8" rebar and cap stamped "L.S. 5823" set); Thence,

Southeasterly, 612.40 feet on the arc of a curve to the right (said curve having a radius of 5529.58 feet, a central angle 06° 20' 44" and a chord which bears S 26° 52' 09" E, 612.08 feet) to the Southeast corner of said Tract J and a point on curve on the Northerly right of way line of Bluewater Road N.W. (a 5/8" rebar and cap stamped "L.S. 5823" set) whence said Albuquerque City Survey Monument "10-K10" bears N 19° 37' 28" W, 1593.69 feet distant; Thence Southwesterly and Northwesterly along the Northerly right of way line of said Bluewater Road N.W. for the following three (3) courses,

Southwesterly, 1059.82 feet along the arc of a curve to the right (said curve having a radius of 2832.79 feet, a central angle of 21° 26' 16" and a chord which bears S 85° 44' 18" W, 1053.75 feet) to a point of tangency (a 5/8" rebar and cap stamped "L.S. 5823" set); Thence,

N 85° 32' 34" W, 671.34 feet to a point of curvature (a 5/8" rebar and cap stamped "L.S. 5823" set); Thence,

Northwesterly, 362.26 feet along the arc of a curve to the left (said curve having a radius of 2188.46 feet, a central angle of 09° 30' 22" and a chord which bears N 88° 17' 43" W, 362.04 feet) to the Southwest corner of said Tract J and a point on the Westerly boundary of said Atrisco Business Park, Unit 2 (a 5/8" rebar and cap stamped "L.S. 5823" set); Thence,

S 00° 39' 36" W, 64.14 feet along a line common to the Westerly boundary of said Atrisco Business Park, Unit 2 and the Easterly Boundary of said unplatted parcel of land to a point, (a 5/8" rebar and cap stamped "L.S. 5823" set) being the Northwest corner of said Lot 2, Atrisco Business Park, Unit 2 and a point on the Southerly right of way line of Bluewater Road N.W., Thence Southeasterly along the Southerly right of way line of said Bluewater Road N.W. for the following three (3) courses,

Southeasterly, 356.79 feet along the arc of a curve to the right (said curve having a radius of 2125.46 feet a central angle of 09° 37' 04" and a chord which bears S 88° 21' 05" E, 356.37 feet) to a point of tangency (a 5/8" rebar and cap stamped "L.S. 5823" set); Thence,

S 83° 32' 34" E, 671.34 feet to a point of curvature (a 5/8" rebar and cap stamped "L.S. 5823" set); Thence,

Southeasterly, 306.45 feet along the arc of a curve to the left (said curve having a radius of 2896.79 feet, a central angle of 06° 03' 41" and a chord which bears S 86° 34' 26" E, 306.31 feet) to a point on curve and the Northeast corner of said Lot 2, also being the Northwest corner of Lot 1, said Atrisco Business Park, Unit 2 (a 5/8" rebar and cap stamped "L.S. 5823" set); Thence,

S 00° 22' 19" W, 1013.17 feet along a line common to said Lots 1 and 2 to the Southeast corner of said Lot 2 and a point on a Southeasterly line of said Town of Atrisco Grant, Unit 4 (a 5/8" rebar and cap stamped "L.S. 5823" set); Thence Southwesterly and Northwesterly along a line common to said Lot 2 and said Town of Atrisco Grant, Unit 4 for the following four (4) courses,

S 75° 04' 57" W, 257.77 feet to a point (a 5/8" rebar and cap stamped "L.S. 5823" set); Thence,

N 83° 32' 41" W, 648.10 feet to a point (a 5/8" rebar and cap stamped "L.S. 5823" set); Thence,

N 83° 57' 38" W, 434.86 feet to a point (a 5/8" rebar and cap stamped "L.S. 5823" set); Thence,

N 83° 48' 15" W, 212.58 feet to the Southwest corner of said Lot 2 and the Southeast corner of said unplatted parcel of land (a 5/8" rebar and cap stamped "L.S. 5823" set); Thence,

N 83° 48' 15" W, 3.36 feet along a line common to said unplatted parcel of land and said Town of Atrisco Grant, Unit 4 to a point (a 5/8" rebar and cap stamped "L.S. 5823" set), said point being the Southwest corner of said unplatted parcel of land and a point on the Easterly boundary of said Town of Atrisco Grant, Unit 5 whence the Northeast corner of Tract B-1-A, Town of Atrisco Grant, Unit 5, filed in the office of the County Clerk on April 8, 1986 in Volume C30, folio 19 (a 5/8" rebar and cap stamped "L.S. 11184") bears S 00°22'57"W, 30.83 feet distant; Thence,

N 00° 22' 58" E, 29.76 feet along a line common to the Westerly boundary of said unplatted parcel of land and the Easterly boundary of said Town of Atrisco Grant, Unit 5 to a point (a 3/4" iron pipe found in place) said point being the Southeast corner of said Lot B-7 and a point on the Northerly right of way line of Arvisu Road N.W.; Thence,

N 00° 19' 15" E, 1037.00 feet along a line common to said Lot B-7 (also being the Easterly boundary of said Town of Atrisco Grant, Unit 5) and the Westerly boundary of said unplatted parcel of land to the Northeast corner of said Tract B-7 and a point on the Southerly right of way line of Bluewater Road; Thence,

N 00° 19' 40" E, 60.10 feet along a line common to the Easterly boundary of said Town of Atrisco Grant, Unit 5 and the Westerly boundary of said unplatted parcel of land to the Southeast corner of said Tract B-8, a point on the Northerly right of way line of said Bluewater Road N.W. (a 5/8" rebar and cap stamped "L.S. 5823" set); Thence,

S 87° 01' 47" W, 411.62 feet along said Northerly right of way line of Bluewater Road N.W. and the Southerly line of said Tract B-8 to the Southwest corner of said Tract B-8 and the Southeast corner of Tract B-9 (a 5/8" rebar and cap stamped LS 5823 set); Thence,

Continued on Sheet 3:

PROFESSIONAL SURVEYOR — STATE OF NEW MEXICO — No. 5823 — GARRY P. HUGG

SHEET 2 OF 12

SHEET 20 OF 25

SURVTEK, INC.
Consulting Surveyors
8643 Paradise Blvd. N.E. Albuquerque, New Mexico 87114
Phone 505-897-3068
Fax 505-897-3077

940172ST

LEGAL DESCRIPTION Continued from Sheet 2:

N 04° 45' 50" W, 1029.33 feet along a line common to said Tracts B-8 and B-9 to the Northwest corner of said Tract B-8, a point on the Southerly right of way line of Los Volcanes Road N.W. (a 5/8" rebar and cap stamped "L.S. 5823" set); Thence,

N 86° 17' 40" E, 503.54 feet along said Southerly right of way line of Los Volcanes Road N.W. to the Northeast corner of said Tract B-8, a point on the Easterly Boundary of said Town of Atrisco Grant, Unit 5 (a 5/8" rebar and cap stamped "L.S. 5823" set); Thence,

N 00° 18' 40" E, 60.10 feet along a line common to the Easterly boundary of said Town of Atrisco Grant, Unit 5 and the Westerly boundary of said unplatted parcel of land to the Southeast corner of said Tract B-14, a point on the Northerly right of way line of Los Volcanes Road N.W. (a 5/8 rebar and cap stamped "L.S. 5823" set); Thence,

N 00° 18' 40" E, 150.00 feet along the line common to said Easterly boundary of said Town of Atrisco Grant, Unit 5 and the Westerly boundary of said unplatted parcel of land to the Northeast corner of the City of Albuquerque Well Site parcel (a 5/8 rebar and cap stamped "L.S. 5823" set); Thence,

S 86° 17' 40 "W, 150.00 feet to the Northwest corner of the City of Albuquerque Well Site parcel (a 5/8 rebar and cap stamped "L.S. 5823" set); Thence,

S 00° 18' 40" W, 150.00 feet to the Southwest corner of the City of Albuquerque Well Site parcel, a point on the Northerly right of way line of Los Volcanes Road N.W. (a 5/8 rebar and cap stamped "L.S. 5823" set); Thence,

S 86° 17' 40" W, 231.70 feet along said Northerly right of way line of Los Volcanes Road N.W. to the Southwest corner of said Tract B-14 and the Southeast corner of Tract B-13 (a 5/8" rebar and cap stamped "L.S. 5823" set); Thence,

N 03° 29' 04" W, 1030.48 feet along a line common to said Tracts B-13 and B-14 to the Northwest corner of said Tract B-14, a point on the Southerly right of way line of Daytona Road N.W. (a 5/8" rebar and cap stamped "L.S. 5823"); Thence,

N 85° 47' 44" E, 450.68 feet along said Southerly right of way line of Daytona Road N.W. to the Northeast corner of said Tract B-14, a point on the Easterly boundary of said Town of Atrisco Grant, Unit 5 (a 1" iron pipe found in place) ; Thence,

N 00° 18' 40" E, 60.19 feet along a line common to the Easterly boundary of said Town of Atrisco Grant, Unit 5 and the Westerly boundary of said unplatted parcel of land to the Southeast corner of Tract B-15, Town of Atrisco Grant, Unit 5 and a point on the Northerly right of way line of said Daytona Road N.W. (a 5/8" rebar and cap stamped "L.S. 5823" set); Thence,

N 00° 20' 29" E, 798.90 feet along a line common to said Tract B-15 (also being the Easterly boundary of said Town of Atrisco Grant, Unit 5) and the Westerly boundary of said unplatted parcel of land to the Northeast corner of the parcel herein described (a 5/8" rebar and cap stamped "L.S. 7719" found in place) said point being the Northeast corner of said Tract B-15 and a point on the Southerly right of way line of said Interstate 40 (Coronado Freeway) whence a New Mexico State Highway Commission right of way monument (found set in concrete) bears N 85° 15' 47" W, 182.67 feet distant; Thence,

S 85° 11' 51" E, 27.25 feet along a line common to said Southerly right of way line of Interstate 40 (Coronado Freeway) and the Northerly boundary of said unplatted parcel of land to the point of beginning of the parcel herein described.

Said parcel contains 144.8648 acres more or less.

FREE CONSENT AND DEDICATION

SURVEYED and REPLATTED and now comprising RIGHT OF WAY MAP, UNSER DIVERSION CHANNEL CORRIDOR (BEING A REPLAT OF A PORTION OF ATRISCO BUSINESS PARK, UNIT 2; A PORTION OF TOWN OF ATRISCO GRANT, UNIT 5, AND AN UNPLATTED PARCEL OF LAND), TOWN OF ATRISCO GRANT, CITY OF ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO, with the free consent of and in accordance with the wishes and desires of the undersigned Owner(s) and Proprietor(s) thereof. Said owner(s) and Proprietor(s) do hereby dedicate to the City of Albuquerque in fee simple with warranty covenants all additional street Right of Way shown hereon. Said Owner(s) and Proprietor(s) do hereby certify that they are so authorized to act.

94017253

Recorded for County Clerk Seal

96020106

RIGHT OF WAY
UNSER DIVERSION CHANNEL CORRIDOR

(BEING A REPLAT OF A PORTION OF ATRISCO BUSINESS PARK, UNIT 2; A PORTION OF TOWN OF ATRISCO GRANT, UNIT 5; AND AN UNPLATTED PARCEL OF LAND)

TOWN OF ATRISCO GRANT
CITY OF ALBUQUERQUE
BERNALILLO COUNTY, NEW MEXICO

OCTOBER , 1995

Owners of Tracts T-1, T-2, T-5, Lots 2-A and 2-A1
SUNWEST BANK OF ALBUQUERQUE, N.A., A National Banking Association

David Garrett, Assistant Vice President

Owners of Tract J-1 and J-2
THE BELL GROUP, INC., a New Mexico Corporation

Hugh Bell, President

Owners of the Tracts T-3, T-4, J-3 and Lot 2-A2
WESTLAND DEVELOPMENT CO., INC., a New Mexico corporation

Barbara Page, President and C. E. O.

Owners of Tracts B-8A, B-8B, B-14A and B-14B

Helen Mary Van Atta Ellis — James Ellis, her husband

John C. Keisher — Linda B. Keisher, his wife

Michael L. Keisher — Margaret H. Keisher, his wife

Thomas F. Keisher — Gretchen C. Keisher, his wife

William B. Keisher — Jan R. Keisher, his wife

Myrle Amanda Van Atta Redmond

Myrle Amanda Van Atta Redmond

Elizabeth Redmond Allbright, a married person

Margaret Amanda Redmond

Margaret Amanda Redmond, F/K/A
Margaret Redmond Haughton, a single person

Kirby H. Oehmke as Personal Representative of the Estate of Rebecca Clare Van Atta Spence Oehmke

Kirby H. Oehmke, a widower

ACKNOWLEDGEMENT

STATE OF NEW MEXICO
COUNTY OF BERNALILLO

This instrument was acknowledged before me on November 9, 1995, by Barbara Page, as President and C.E.O. of Westland Development Co., Inc., a New Mexico corporation.

Linda J. Blair
Notary Public

8/5/97

ACKNOWLEDGEMENT

STATE OF NEW MEXICO
COUNTY OF BERNALILLO

This instrument was acknowledged before me on OCTOBER 11, 1995, by Hugh Bell, as President of the Bell Group, Inc., a New Mexico corporation.

Kathleen A. Carrillo
Notary Public 5-22-99. MY COMMISSION EXPIRES

ACKNOWLEDGEMENT

STATE OF NEW MEXICO
COUNTY OF BERNALILLO

This instrument was acknowledged before me on November 7, 1995, by David Garrett as Assistant Vice President of Sunwest Bank of Albuquerque, N.A., a National Banking Association.

Margie R. Schell
Notary Public

OFFICIAL SEAL
Margie R. Schell
NOTARY PUBLIC
STATE OF NEW MEXICO
My Commission Expires 7-2-98

ACKNOWLEDGEMENT

STATE OF NEW MEXICO
COUNTY OF BERNALILLO

This instrument was acknowledged before me on November 3, 1995, by William B. Keisher and Jan R. Keisher, his wife.

Lucy M. Contreras
Notary Public
My commission expires May 19, 1999

ACKNOWLEDGEMENT

STATE OF NEW MEXICO
COUNTY OF BERNALILLO

This instrument was acknowledged before me on OCT 27, 1995, by Thomas F. Keisher and Gretchen C. Keisher, his wife.

Paula H. Keller
Notary Public
My commission expires 1/27/98.

PROFESSIONAL SURVEYOR STATE OF NEW MEXICO GARRY P. HUGO

SHEET 3 OF 12

SURVTEK, INC.
Consulting Surveyors
9643 Pendaris Blvd. N.E. Albuquerque, New Mexico 87104

Recorded for County Clerk Seal

96020106

RIGHT OF WAY MAP
UNSER DIVERSION CHANNEL CORRIDOR

(BEING A REPLAT OF A PORTION OF ATRISCO BUSINESS PARK, UNIT 2; A PORTION OF TOWN OF ATRISCO GRANT, UNIT 5; AND AN UNPLATTED PARCEL OF LAND)

TOWN OF ATRISCO GRANT
CITY OF ALBUQUERQUE
BERNALILLO COUNTY, NEW MEXICO

SEPTEMBER , 1995

ACKNOWLEDGEMENT

STATE OF NEW MEXICO
COUNTY OF BERNALILLO

This instrument was acknowledged before me on November 3, 1995, by Michael L. Keisher and Margaret H. Keisher, his wife.

Lucy M. Contreras
Notary Public
My commission expires May 19, 1999

ACKNOWLEDGEMENT

STATE OF NEW MEXICO
COUNTY OF BERNALILLO

This instrument was acknowledged before me on NOVEMBER 1, 1995, by Myrle Amanda Van Atta Redmond.

Michelle L. Fuertes
Notary Public My commission Expires: 10/19/97

ACKNOWLEDGEMENT

STATE OF NEW MEXICO
COUNTY OF BERNALILLO

This instrument was acknowledged before me on OCTOBER 11, 1995, by Helen Mary Van Atta Ellis and James Ellis, her husband.

Kathleen A. Carrillo
Notary Public My commission expires: 5/22/99

ACKNOWLEDGEMENT

STATE OF NEW MEXICO
COUNTY OF BERNALILLO

This instrument was acknowledged before me on November 1, 1995, by Kirby H. Oehmke as Personal Representative of the Estate of Rebecca Clare Van Atta Spence Oehmke.

Bette Jean Stephens
Notary Public MY COMMISSION EXPIRES: 9-13-97

ACKNOWLEDGEMENT

STATE OF NEW MEXICO
COUNTY OF BERNALILLO

This instrument was acknowledged before me on November 1, 1995, by Kirby H. Oehmke, a widower.

Bette Jean Stephens
Notary Public MY COMMISSION EXPIRES: 9-13-97

ACKNOWLEDGEMENT

STATE OF NEW MEXICO
COUNTY OF BERNALILLO

This instrument was acknowledged before me on October 30, 1995, by John C. Keisher and Linda B. Keisher, his wife.

Phoebe Gauel
Notary Public
MY COMMISSION EXPIRES

PHOEBE GAUEL NOTARY PUBLIC STATE OF CONNECTICUT

ACKNOWLEDGEMENT

STATE OF NEW MEXICO
COUNTY OF BERNALILLO

This instrument was acknowledged before me on November 1, 1995, by Margaret Amanda Redmond, F/K/A Margaret Redmond Haughton, a single person.

Michelle L. Fuertes
Notary Public My commission Expires: 10/19/97

ACKNOWLEDGEMENT

STATE OF NEW MEXICO
COUNTY OF BERNALILLO

This instrument was acknowledged before me on November 4, 1995, by Elizabeth Redmond Allbright, a married person.

Michelle L. Fuertes
Notary Public
My commission expires: 10/19/97

PROFESSIONAL SURVEYOR STATE OF NEW MEXICO GARRY P. HUGO

SHEET 4 OF 12

SURVTEK, INC.
Consulting Surveyors
9643 Pendaris Blvd. N.E. Albuquerque, New Mexico 87104

SHEET 21 OF 25

94017254

96020106 - RIGHT OF WAY M

UNSER DIVERSION CHANNEL CORRIDOR

(BEING A REPLAT OF A PORTION OF ATRISCO BUSINESS PARK, UNIT 2; A PORTION OF TOWN OF ATRISCO GRANT, UNIT 5; AND AN UNPLATTED PARCEL OF LAND)

TOWN OF ATRISCO GRANT
CITY OF ALBUQUERQUE
BERNALILLO COUNTY, NEW MEXICO

SEPTEMBER , 1995

Recorded for County Clerk Seal

LINE TABLE

LINE	DIRECTION	DISTANCE
L1	S 85°09'54" E	288.82'
L2	S 58°57'18" W	132.85'
L3	S 41°28'57" E	44.81'
L4	N 59°57'19" E	38.79'
L5	N 86°13'26" E	263.46'
L6	S 86°13'26" W	258.49'
L9	S 87°01'47" W	411.62'
L10	S 86°17'40" W	231.70'
L11	S 85°11'51" E	57.25'
L12	N 00°20'03" E	790.84'
L13	N 16°03'13" W	83.82'
L14	S 00°38'36" W	394.98'
L15	N 29°42'23" E	72.07'
L16	N 00°39'36" E	499.58'
L26	S 85°09'54" E	264.91'
L28	S 85°09'54" E	23.91'
L29	N 86°13'26" E	15.04'
L33	N 86°13'26" E	72.22'
L35	S 88°20'24" E	130.64'
L42	S 00°38'36" W	367.17'
L43	S 00°38'36" E	167.04'
L44	S 00°38'36" W	281.11'
L45	N 86°17'40" E	64.48'
L55	S 00°38'36" W	64.18'
L56	S 00°38'36" W	64.14'
L57	N 83°48'13" W	212.58'
L58	N 00°38'36" E	29.76'
L59	N 83°48'13" W	175.82'
L60	N 83°48'13" W	1.39'
L61	N 00°38'36" E	221.38'
L62	N 00°38'36" E	839.54'
L63	N 83°48'13" W	33.37'
L66	N 00°18'40" E	60.10'
L67	N 00°18'40" E	60.10'
L68	N 86°17'40" E	503.54'
L69	N 85°47'44" E	450.68'
L70	N 00°18'40" E	60.19'
L71	S 86°13'26" W	243.45'
L72	S 00°18'40" W	365.76'
L73	S 00°18'40" W	521.21'
L74	N 00°38'36" E	475.00'
L75	S 88°11'42" W	59.79'
L77	N 00°38'36" E	2.00'
L78	N 00°38'36" E	2.00'
L79	S 00°22'15" W	2.00'
L80	N 83°40'17" E	16.49'
L81	N 81°55'27" W	16.16'
L82	N 88°22'10" E	10.74'
L83	N 86°05'[illegible]" W	10.51'
L84	N 85°58'34" W	671.34'
L85	S 85°58'34" E	671.34'
L86	N 83°48'13" W	33.37'
L88	S 00°22'57" W	30.93'
L89	N 00°18'40" E	150.00'
L90	S 86°17'40" W	150.00'
L91	S 00°18'40" W	150.00'
L92	S 85°47'44" W	22.81'
L93	S 85°47'44" W	22.45'
L94	N 85°47'44" E	22.47'
L95	N 85°47'44" E	22.84'
L96	S 14°53'14" E	83.31'
L97	S 14°53'14" E	0.61'
L98	N 85°47'44" E	51.26'
L99	S 00°20'03" W	56.58'
L100	S 85°47'44" W	51.41'
L101	N 86°17'40" E	94.25'
L102	S 86°58'14" W	94.18'
L103	N 00°39'35" E	2.01'
L104	S 86°58'14" W	16.04'

LINE TABLE
(RECORD INFORMATION)

LINE	DIRECTION	DISTANCE
L1	(S 85°08'00" E)	(288.91')
L2	(S 60°00'00" W)	(132.85')
L3	(S 41°20'05" E)	(44.88')
L4	(N 60°00'00" E)	(38.86')
L5	(N 86°16'00" E)	(263.50')
L6	(S 86°16'00" W)	(258.54')
L9	(N 86°42' E)	(411.62')
L57	(N 83°45'25" W)	(209.13')
L68	(N 85°28' E)	(503.54')
L69	(N 85°28' E)	(450.68')
L84	(N 85°30'06" W)	(671.34')
L85	(S 85°30'06" E)	(671.34')
L90	(S 85°58' W)	(150.0')

CURVE TABLE

CURVE	RADIUS	LENGTH	TANGENT	CHORD	BEARING	DELTA
C1	622.78'	733.31'	415.85'	691.68'	S 51°26'50" E	67°27'53"
C2	4415.20'	796.30'	399.23'	795.22'	S 22°31'41" E	10°20'01"
C3	2323.83'	1065.41'	542.24'	1056.11'	N 73°05'22" E	26°16'07"
C4	2259.83'	1036.07'	527.31'	1027.02'	S 73°05'22" W	26°16'07"
C5	2896.79'	306.45'	153.37'	306.31'	S 86°34'26" E	06°03'41"
C6	2125.46'	356.79'	178.81'	356.37'	S 88°21'05" E	09°37'04"
C7	2189.46'	363.26'	182.05'	362.84'	N 88°17'43" W	09°30'22"
C8	2832.79'	1059.92'	536.23'	1053.72'	S 85°44'16" W	21°26'16"
C9	5529.58'	612.40'	306.53'	612.08'	S 26°32'09" E	06°20'44"
C10	2123.46'	175.11'	87.60'	175.06'	N 88°11'54" E	04°43'29"
C12	2123.46'	181.48'	90.79'	181.42'	S 85°39'27" E	04°53'48"
C13	2191.46'	291.37'	145.90'	291.16'	N 87°21'04" W	07°37'05"
C15	2191.46'	72.09'	36.05'	72.08'	S 87°[illegible]'51" W	01°53'05"
C16	2830.79'	1058.86'	535.69'	1052.70'	S 85°44'29" W	21°25'54"
C17	2898.79'	306.66'	153.47'	306.52'	S 86°34'26" E	06°03'41"
C18	5529.58'	2.02'	1.01'	2.02'	S 23°42'25" E	00°01'15"
C19	5529.58'	610.37'	305.50'	610.06'	S 26°32'47" E	06°19'28"

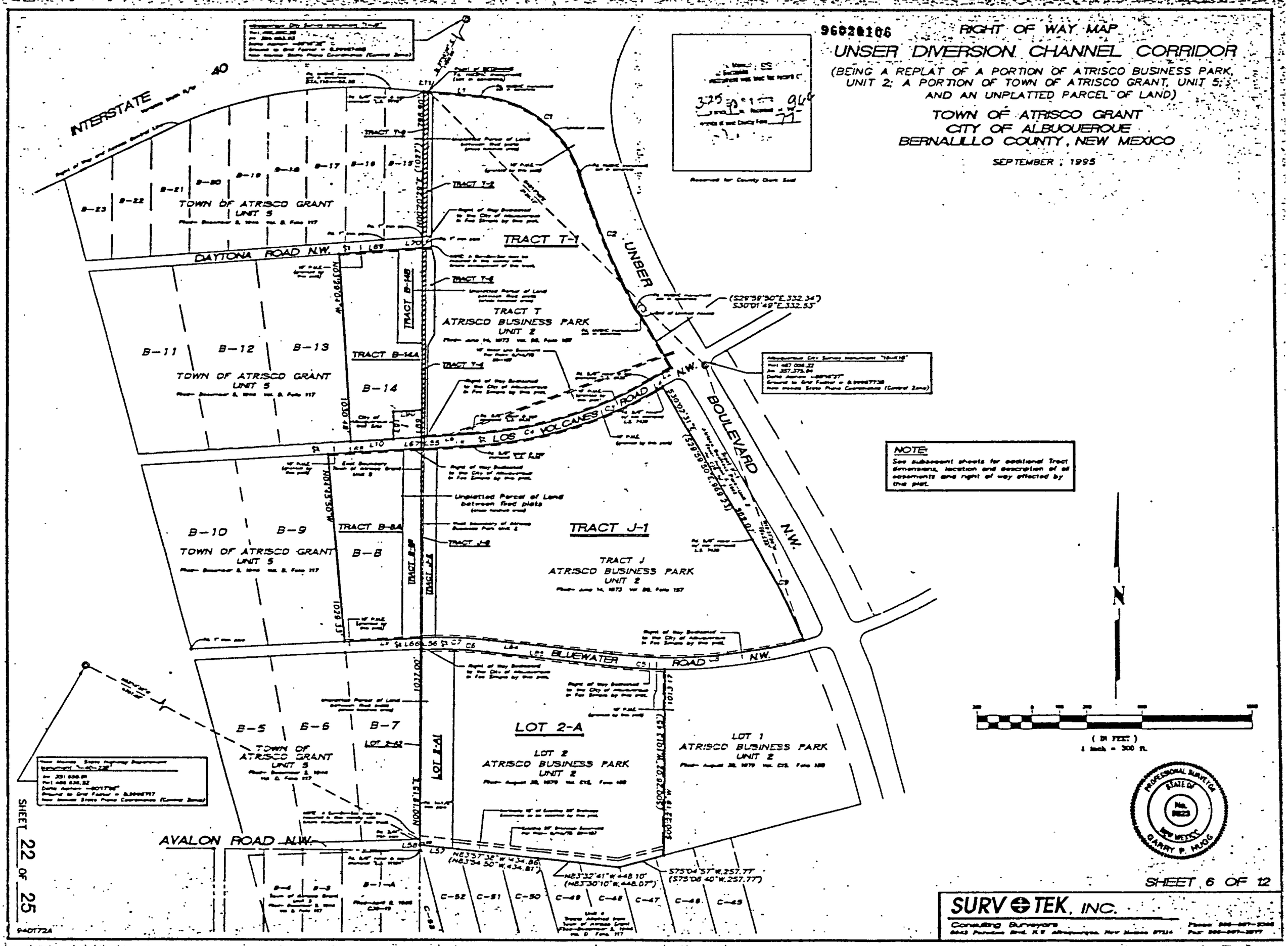
CURVE TABLE
(RECORD INFORMATION)

CURVE	RADIUS	LENGTH	TANGENT	CHORD	BEARING	DELTA
C1	(622.78')	(733.41')		(691.76')	(S 51°23'45" E)	(67°28'26")
C2	(4415.20')	(796.28')		(795.20')	(S 22°48'50" E)	(10°20'00")
C3	(2323.83')	(1065.34')				
C4	(2259.83')	(1036.00')				
C5	(2896.79')	(306.69')				
C6	(2125.46')	(356.73')				
C7	(2189.46')	(363.26')				
C8	(2832.79')	(1059.90')				
C9	(5529.58')	(612.22')				

PROFESSIONAL SURVEYOR STATE OF NEW MEXICO No. 5823 GARRY P. HUGG

SHEET 5 OF 12

SURVETEK, INC.
Consulting Surveyors
8643 Pardoner Blvd. N.E. Albuquerque, New Mexico 87114
Phone: 505-897-3366
Fax: 505-897-3377



96020100

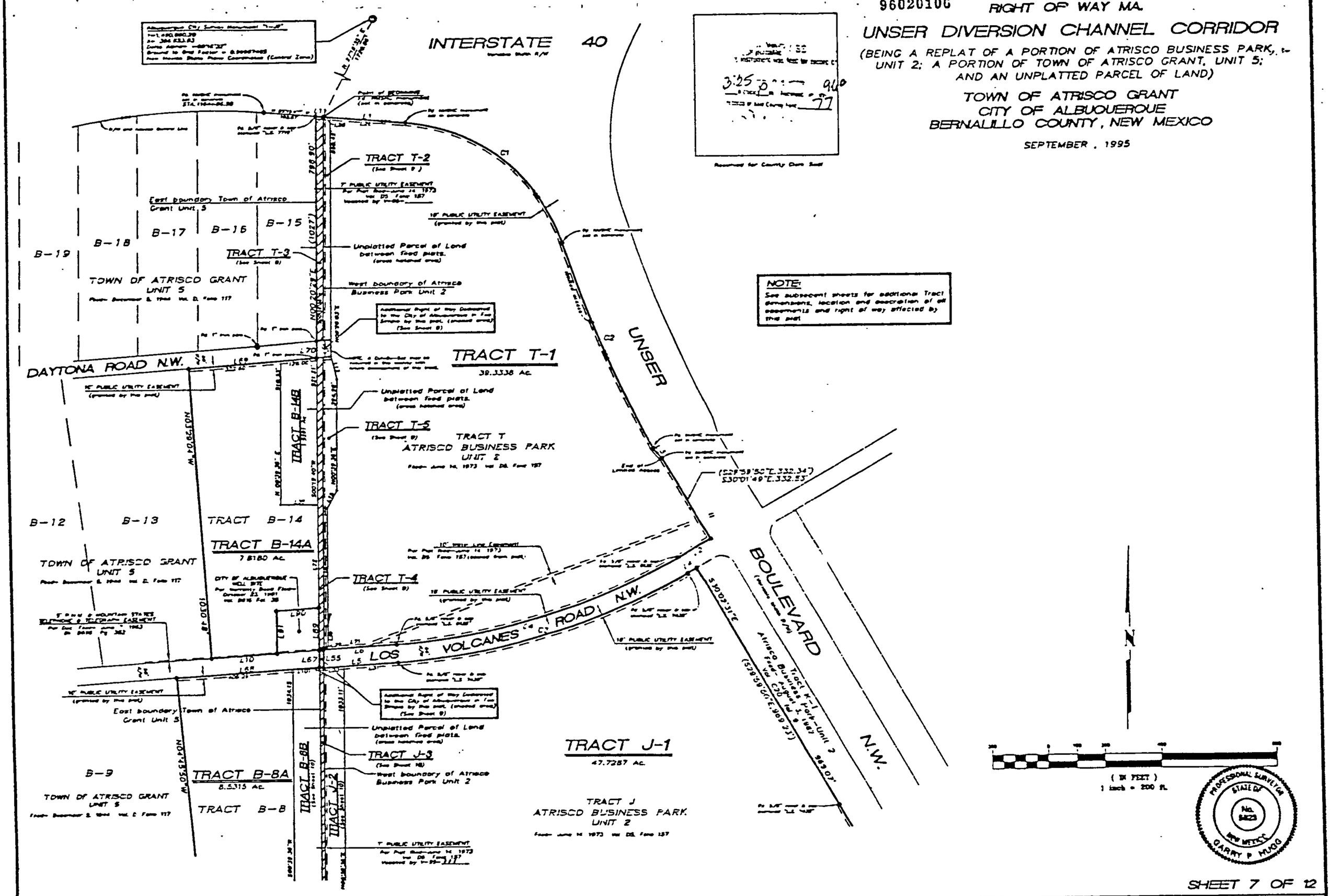
RIGHT OF WAY MA

UNSER DIVERSION CHANNEL CORRIDOR

(BEING A REPLAT OF A PORTION OF ATRISCO BUSINESS PARK, UNIT 2; A PORTION OF TOWN OF ATRISCO GRANT, UNIT 5; AND AN UNPLATTED PARCEL OF LAND)

TOWN OF ATRISCO GRANT
CITY OF ALBUQUERQUE
BERNALILLO COUNTY, NEW MEXICO

SEPTEMBER, 1995



SHEET 7 OF 12

SURV TEK, INC.
Consulting Surveyors
8643 Paradise Blvd. N.E. Albuquerque, New Mexico 87114
Phone 505-897-2808
Fax 505-897-2877

9401728

96020100

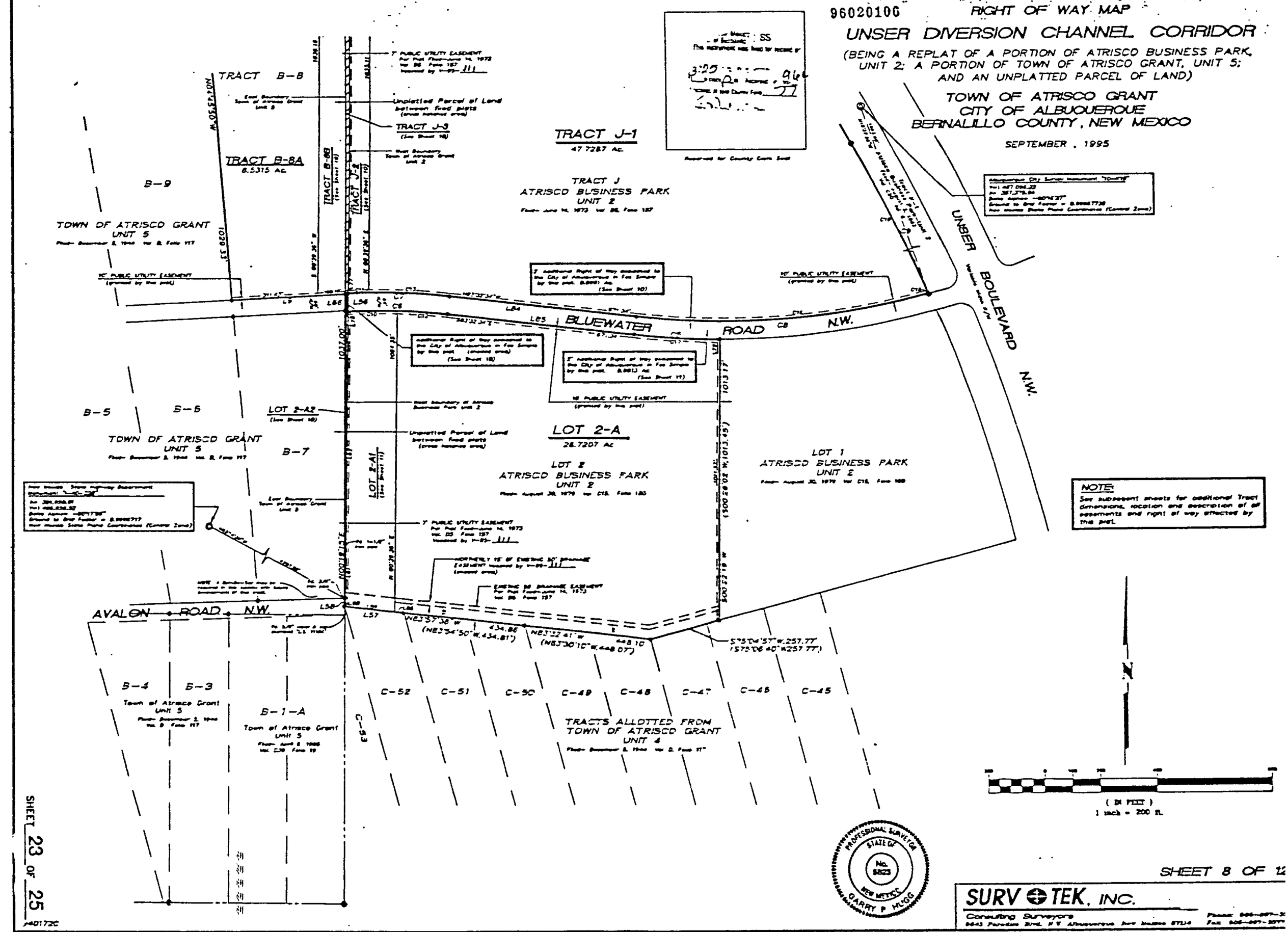
RIGHT OF WAY MAP

UNSER DIVERSION CHANNEL CORRIDOR

(BEING A REPLAT OF A PORTION OF ATRISCO BUSINESS PARK, UNIT 2; A PORTION OF TOWN OF ATRISCO GRANT, UNIT 5; AND AN UNPLATTED PARCEL OF LAND)

TOWN OF ATRISCO GRANT
CITY OF ALBUQUERQUE
BERNALILLO COUNTY, NEW MEXICO

SEPTEMBER, 1995



SHEET 8 OF 12

SURV TEK, INC.
Consulting Surveyors
8643 Paradise Blvd. N.E. Albuquerque, New Mexico 87114
Phone 505-897-2808
Fax 505-897-2877

SHEET 23 OF 25

9401720

96020106

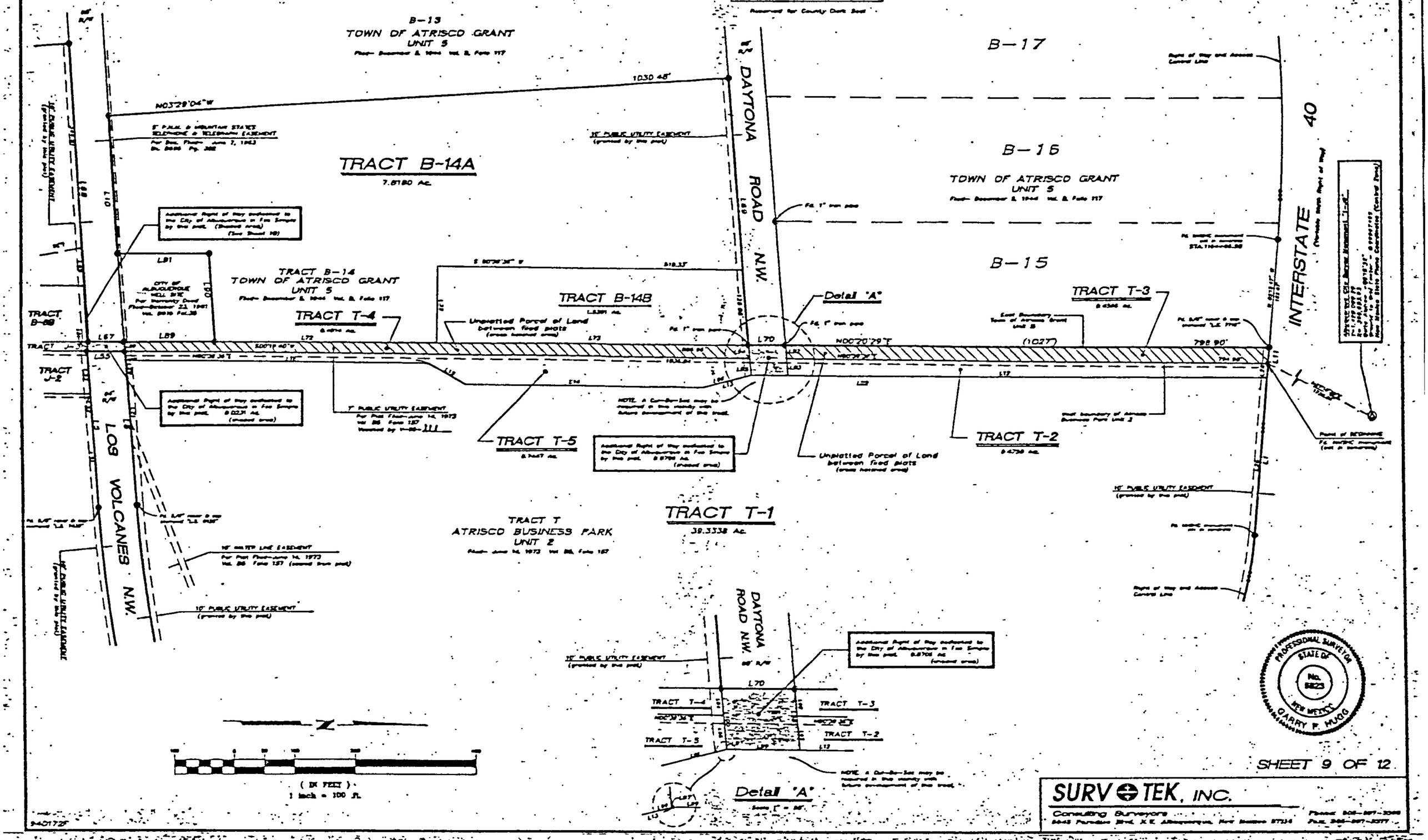
RIGHT OF WAY MAP

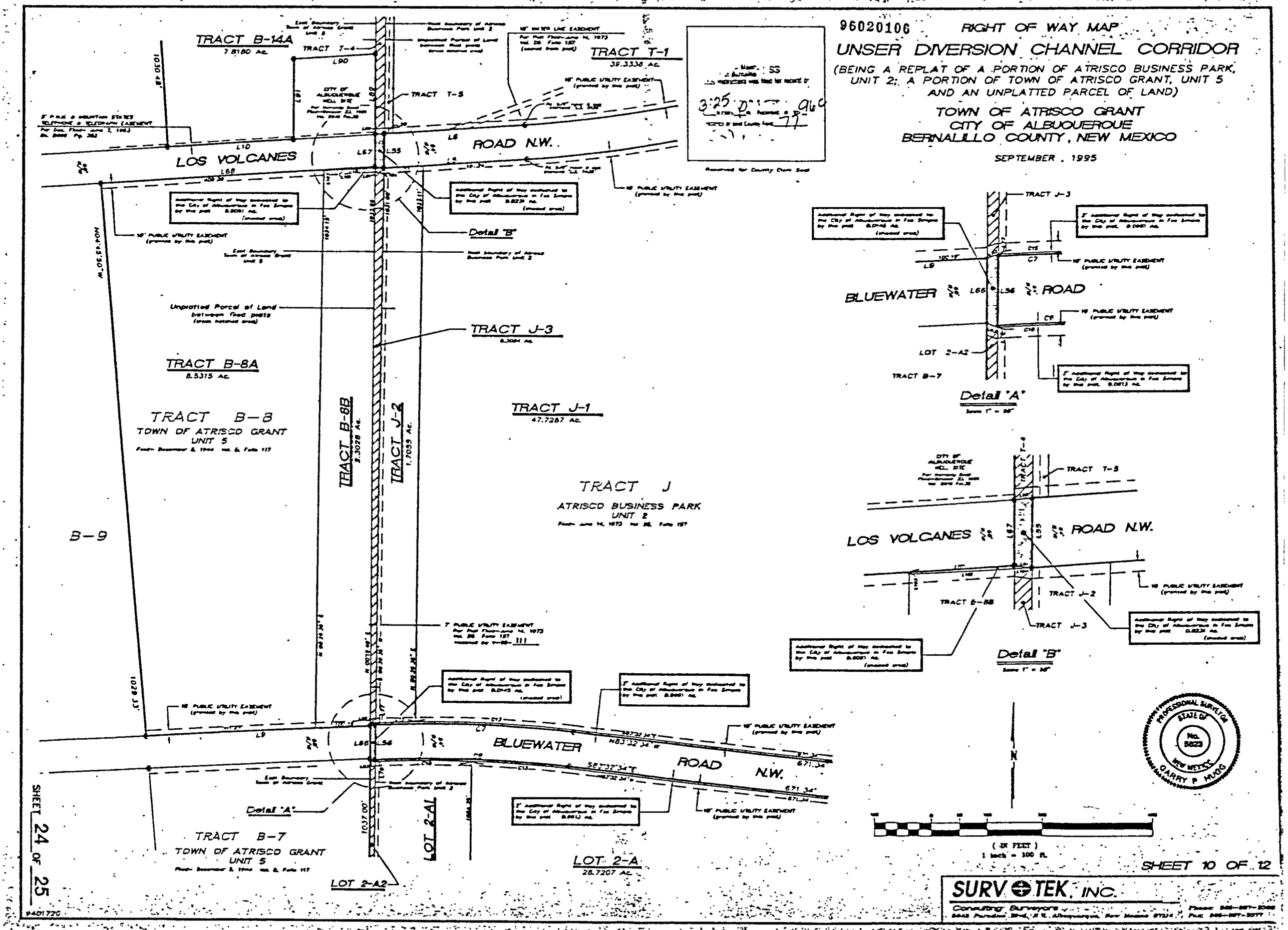
UNSER DIVERSION CHANNEL CORRIDOR

(BEING A REPLAT OF A PORTION OF ATRISCO BUSINESS PARK, UNIT 2; A PORTION OF TOWN OF ATRISCO GRANT, UNIT 5 AND AN UNPLATTED PARCEL OF LAND)

TOWN OF ATRISCO GRANT
CITY OF ALBUQUERQUE
BERNALILLO COUNTY, NEW MEXICO

SEPTEMBER, 1995





SHEET 24 OF 25

96020106

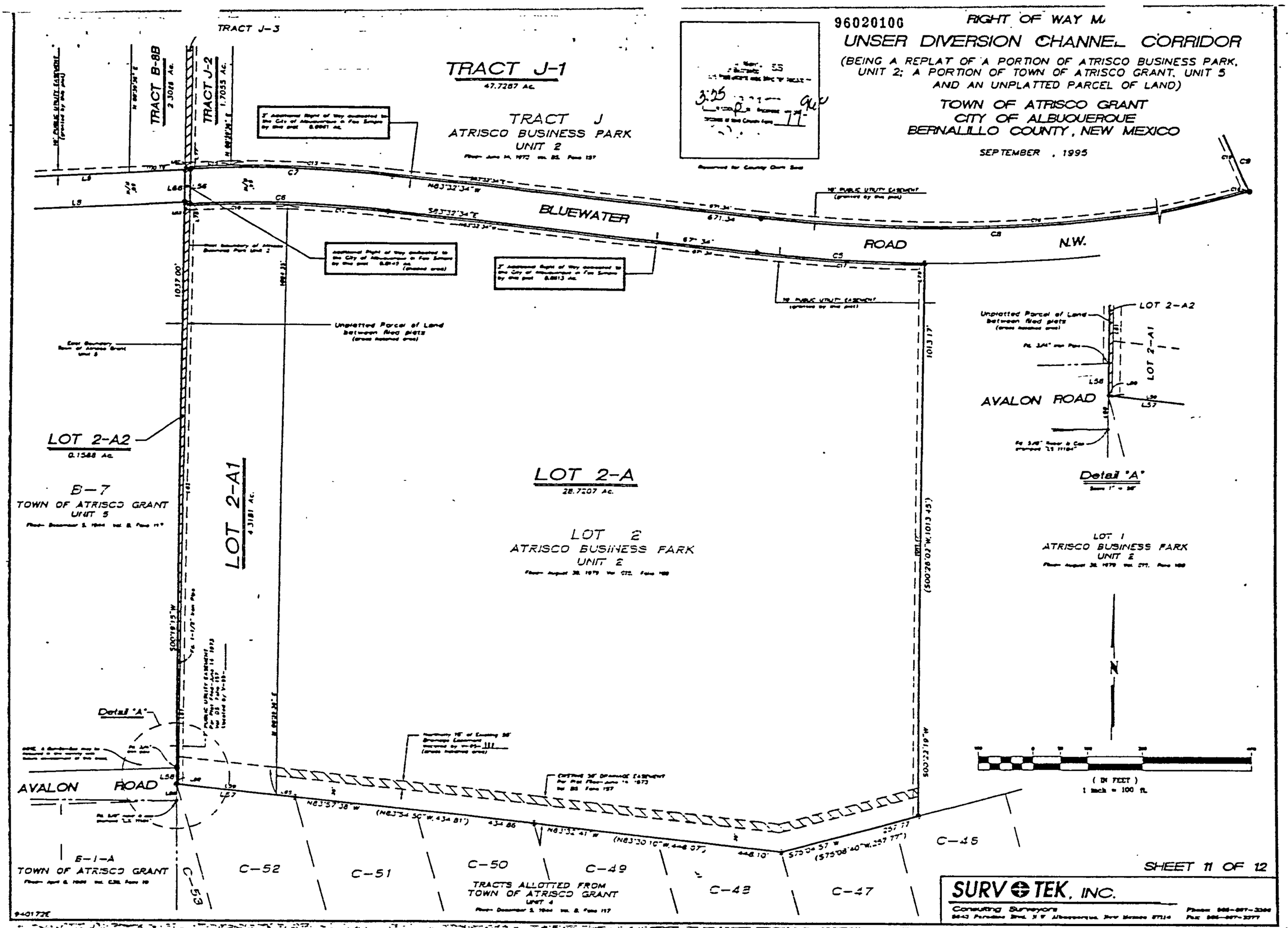
RIGHT OF WAY MA

UNSER DIVERSION CHANNEL CORRIDOR

(BEING A REPLAT OF A PORTION OF ATRISCO BUSINESS PARK, UNIT 2; A PORTION OF TOWN OF ATRISCO GRANT, UNIT 5 AND AN UNPLATTED PARCEL OF LAND)

TOWN OF ATRISCO GRANT
CITY OF ALBUQUERQUE
BERNALILLO COUNTY, NEW MEXICO

SEPTEMBER , 1995



SHEET 11 OF 12

SURVTEK, INC.
Consulting Surveyors

RIGHT OF WAY MAP

UNSER DIVERSION CHANNEL CORRIDOR

(BEING A REPLAT OF A PORTION OF ATRISCO BUSINESS PARK, UNIT 2; A PORTION OF TOWN OF ATRISCO GRANT, UNIT 5; AND AN UNPLATTED PARCEL OF LAND)

96020106

TOWN OF ATRISCO GRANT
CITY OF ALBUQUERQUE
BERNALILLO COUNTY, NEW MEXICO

SEPTEMBER , 1995

NOTE:

The plat of the RIGHT OF WAY MAP, UNSER DIVERSION CHANNEL CORRIDOR (BEING A REPLAT OF A PORTION OF ATRISCO BUSINESS PARK, UNIT 2; A PORTION OF TOWN OF ATRISCO GRANT, UNIT 5; AND AN UNPLATTED PARCEL OF LAND) TOWN OF ATRISCO GRANT, CITY OF ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO has been granted a variance or waiver by the City of Albuquerque and the Albuquerque Metropolitan Arroyo Flood Control Authority from certain subdivision requirements pursuant to Section 7 of the City of Albuquerque Subdivision Ordinance.

Future subdivision of land within this plat, zoning site development plan approvals, and development permits may be conditioned upon dedication of rights of way and easements, and/or upon infrastructure improvements by the owner for water, sewer, streets, drainage, grading and parks in accordance with current resolutions, ordinances and policies in effect at the time for any specific proposal.

The City of Albuquerque and UMRGFCA with reference to drainage/ any required and/or permit easements to be added, modified or removed when future plats or site development plans are approved.

By its approval the City of Albuquerque makes no representation or warranties as to availability of utilities, or final approval of all requirements including (but not limited to) the following items: water and sanitary sewer availability; future street dedications and/or improvements; park and open space requirements; drainage requirements and/or improvements; and excavation, filling or grading requirements. Any person intending development of lands within this subdivision is cautioned to investigate the status of these items.

At such time as all conditions have been satisfactorily met the City Engineer shall approve a recordable document removing such conditions from all or from a portion of the area within the subject subdivision.

A SUMMARY NOTICE OF THESE CONDITIONS WAS RECORDED IN THE OFFICE OF THE COUNTY CLERK OF BERNALILLO COUNTY, NEW MEXICO, ON JANUARY 19, 1996 IN VOLUME 96-2, FOLIO 4241-4254.

AS RE-RECORDED IN THE OFFICE OF THE COUNTY CLERK OF BERNALILLO COUNTY, NEW MEXICO ON FEB. 21, 1996 IN VOLUME 96-5, FOLIO 9282-9296.

U S WEST COMMUNICATIONS QUITCLAIM

KNOW ALL MEN BY THESE PRESENTS: That U S WEST COMMUNICATIONS, INC., a Colorado Corporation, hereinafter called "Company" for and in consideration of One Dollar ($1.00) and other good and valuable considerations in hand paid, the receipt whereof is hereby confessed and acknowledged, does hereby release, remise and quitclaim all the right, title and interest in the easements shown to be vacated on this plat and hereby expressly excepting and reserving to the Company, any and all interest otherwise acquired in said property, except as shown to be vacated.

IN WITNESS WHEREOF, the Company has caused these presents to be executed by its duly authorized officer this 10th day of October, 1995.

U S WEST COMMUNICATIONS, INC.

By: A. F. Sales

Manager – Network and Technology Services

STATE OF NEW MEXICO
COUNTY OF BERNALILLO

This instrument was acknowledged before me on 10th October, 1995, by A. F. Sales as the Manager/Network and Technology Services of U S West Communications, Inc., a Colorado Corporation.

Witness my hand and official seal.

Norma G Carrillo — My commission expires 2-6-99

Notary Public

OFFICIAL SEAL
NORMA G CARRILLO
NOTARY PUBLIC
STATE OF NEW MEXICO
My Commission Expires 2-6-99

PNM EASEMENT RELEASE APPROVAL

Public Service Company of New Mexico does hereby release, waive, quitclaim and discharge its right, title and interest in the easements (granted by prior plat, repmt or document) shown to be vacated on this plat.

PUBLIC SERVICE COMPANY OF NEW MEXICO

By: Rob Roberts

OFFICIAL SEAL
RUBIN PHILLIPS
NOTARY PUBLIC
STATE OF NEW MEXICO
My Commission Expires 8-9-97

STATE OF NEW MEXICO
COUNTY OF BERNALILLO

The instrument was acknowledged before me on 10Th October, 1995, by Rob Roberts as Right of Way Manager of the Public Service Company of New Mexico, a New Mexico Corporation.

Rub Phillips — My commission expires 8-9-97

Notary Public

GAS COMPANY OF NM EASEMENT RELEASE APPROVAL

Gas Company of New Mexico, a Division of Public Service Company of New Mexico does hereby release, waive quit claim and discharge its right, title and interest in the easements (granted by prior plat, repmt or document) shown to be vacated on this plat.

GAS COMPANY OF NEW MEXICO

By: Rob Roberts

My Commission Expires 8-9-97

STATE OF NEW MEXICO
COUNTY OF BERNALILLO

This instrument was acknowledged before me on NOV 7, 1995 by Rob Roberts as Right of Way Manager of Gas Company of New Mexico, a Division of Public Service Company of New Mexico. (a New Mexico corporation)

Rub Phillips — My commission expires 8-9-97

Notary Public

PROFESSIONAL SURVEYOR — STATE OF NEW MEXICO — No. 9803 — GARY P. HUGG

SHEET 12 OF 12

SURVTEK, INC.
Consulting Surveyors

SHEET 25 OF 25

9401728

Unser Diversion LOMR
Albuquerque, New Mexico
Supporting Document #1

CONSTRUCTION PLANS
FOR
CITY OF ALBUQUERQUE

AIRPORT DRIVE / BLUEWATER ROAD STORM DRAIN

PREPARED FOR

SUNWEST BANK
SPECIAL ASSETS DEPARTMENT

GENERAL NOTES

1 ALL WORK DETAILED ON THESE PLANS, EXCEPT AS OTHERWISE STATED OR PROVIDED HEREON, SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION - 1986 EDITION, AS AMENDED WITH UPDATE No 4

2. TWO (2) WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTACT ONE CALL SYSTEM, INC, 260-1990, FOR LOCATION OF EXISTING UTILITIES

3 THESE DRAWINGS REFLECT INFORMATION ON UTILITIES GATHERED BY SITE INSPECTION, DISCUSSIONS WITH MUNICIPAL OFFICIALS, AND PREVIOUS CONSTRUCTION DRAWINGS IT IS POSSIBLE THAT THE EXACT LOCATION OF LINES AND UTILITY CONNECTION POINTS IN THE VICINITY OF THE REQUIRED WORK MAY BE DIFFERENT FROM THE LOCATION SHOWN ON THESE DRAWINGS PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE HORIZONTAL AND VERTICAL LOCATIONS OF ALL OBSTRUCTIONS SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER SO THAT THE CONFLICT CAN BE RESOLVED WITH A MINIMUM AMOUNT OF DELAY.

4 ALL GAS, ELECTRIC, TELEPHONE LINES, CABLES, AND APPURTENANCES ENCOUNTERED DURING CONSTRUCTION THAT REQUIRE RELOCATION SHALL BE RELOCATED BY THE RESPECTIVE UTILITY CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION OF ALL NECESSARY UTILITY ADJUSTMENTS

5. IT WILL BE THE CONTRACTORS RESPONSIBILITY TO PROTECT AND MAINTAIN IN SERVICE ALL EXISTING UTILITIES

6. ALL WORK ON THIS PROJECT SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE, AND LOCAL LAWS, RULES, AND REGULATIONS CONCERNING CONSTRUCTION SAFETY AND HEALTH THESE DRAWINGS DO NOT INCLUDE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY WHICH SHALL REMAIN THE CONTRACTORS RESPONSIBILITY

7. ALL EXCAVATION/CONSTRUCTION PERMITS WILL BE REQUIRED BEFORE BEGINNING ANY WORK WITHIN THE CITY RIGHT-OF-WAY. AN APPROVED COPY OF THESE PLANS MUST BE SUBMITTED AT THE TIME OF APPLICATION FOR PERMITS

8 THE CONTRACTOR SHALL EXERCISE REASONABLE CARE DURING CONSTRUCTION TO PREVENT THE MOVEMENT OF SEDIMENT FROM THE SITE INTO EXISTING STREETS OR ABUTTING PROPERTY. LOOSE SOIL STOCKPILES DURING CONSTRUCTION ACTIVITIES SHALL BE PROMPTLY CLEANED UP OR PROTECTED FROM BEING CARRIED DOWNSTREAM BY FLOWING WATER

9 ALL UNPAVED AREAS DISTURBED BY THE CONTRACTORS WORK SHALL BE REVEGATATED IN ACCORDANCE WITH THE SUPPLEMENTAL TECHNICAL SPECIFICATION SECTION 1012

10 DISPOSAL OF ALL WASTE MATERIAL SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AS SPECIFIED IN SECTION 614 OF THE GENERAL CONDITIONS IN THE CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION - 1986 EDITION

11 A DISPOSAL SITE FOR ALL EXCESS EXCAVATION MATERIAL, ASPHALTIC PAVING, CONCRETE CURBS AND SIDEWALKS, ETC, SHALL BE OBTAINED BY THE CONTRACTOR IN COMPLIANCE WITH APPLICABLE ENVIRONMENTAL REGULATIONS AND APPROVED BY THE FIELD ENGINEER ALL COSTS INCURRED IN OBTAINING A DISPOSAL SITE AND HAUL THERETO SHALL BE CONSIDERED INCIDENTAL TO THE PROJECT AND NO SEPARATE MEASUREMENT OR PAYMENT SHALL BE MADE

12 THE CONTRACTOR WILL BE REQUIRED TO CONFINE HIS WORK WITHIN THE EASEMENT LIMITS AND / OR PUBLIC RIGHT-OF-WAY TO PRESERVE EXISTING VEGETATION AND PRIVATE PROPERTY THE CONTRACTOR SHALL NOT STORE ANY EQUIPMENT OR MATERIAL WITHIN THE RIGHT-OF-WAY UNLESS THE EQUIPMENT OR MATERIAL IS PROPERLY SHIELDED UTILIZING CURRENT SAFETY DESIGN AND INSTALLATION METHODS THE SAFETY DESIGN FOR THIS SHIELDING SHALL BE PROVIDED BY THE CONTRACTOR AND MUST BE APPROVED BY THE ENGINEER BEFORE IMPLEMENTING THERE WILL BE NO DIRECT MEASUREMENT OR PAYMENT FOR THE DESIGN, MATERIALS, INSTALLATION, AND REMOVAL OF THE SAFETY BARRIER

13 CONTRACTOR SHALL MAINTAIN ACCESS TO ADJACENT PROPERTIES DURING CONSTRUCTION

14 CONTRACTOR SHALL COORDINATE WITH THE CITY OF ALBUQUERQUE WATER SYSTEMS DIVISION A MINIMUM OF THREE (3) WORKING DAYS PRIOR TO INITIATING ANY WORK AFFECTING ANY EXISTING PUBLIC OR PRIVATE WATERLINES

14 WHEN ABUTTING NEW PAVEMENT TO EXISTING, SAWCUT EXISTING PAVEMENT TO A STRAIGHT EDGE AND AT A RIGHT ANGLE, OR AS APPROVED BY THE PROJECT ENGINEER, TO REMOVE ANY BROKEN OR CRACKED PAVEMENT ALL SAWCUT PAVEMENT SHALL BE SPRAYED WITH TACK COAT PRIOR TO INSTALLATION OF ADJOINING ASPHALT PAVEMENT

16 A MINIMUM OF THREE (3) WORKING DAYS PRIOR TO COMMENCING CONSTRUCTION, THE CONTRACTOR SHALL SUBMIT A DETAILED CONSTRUCTION SCHEDULE AND A CONSTRUCTION SIGNING AND BARRICADE PLAN TO CONSTRUCTION COORDINATION TWO (2) WORKING DAYS PRIOR TO COMMENCING CONSTRUCTION, THE CONTRACTOR SHALL OBTAIN A BARRICADING PERMIT FROM THE TRAFFIC ENGINEERING DIVISION CONTRACTOR SHALL NOTIFY BARRICADE ENGINEER (768-2551) PRIOR TO OCCUPYING AN INTERSECTION SEE SECTION 19 OF THE SPECIFICATIONS
ALL STREET STRIPING ALTERED OR DESTROYED SHALL BE REPLACED IN KIND BY CONTRACTOR TO LOCATION AND IN KIND AS EXISTING OR AS INDICATED BY THIS PLAN SET

17 THE CONTRACTOR SHALL REPLACE ANY PERMANENT PAVEMENT MARKINGS AND OR TRAFFIC SIGNS WHICH ARE DAMAGED OR REMOVED DURING CONSTRUCTION OF THIS PROJECT

18 THIS DOCUMENT, AND THE IDEAS AND DESIGNS INCORPORATED HEREIN, ARE INTENDED FOR USE ON THIS PROJECT AND IS NOT TO BE USED, IN WHOLE OR IN PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF EASTERLING & ASSOCIATES, INC IN THE EVENT OF UNAUTHORIZED USE, THE USER ASSUMES ALL RESPONSIBILITY AND LIABILITY WHICH RESULTS

19 CONTRACTOR SHALL NOTIFY THE ENGINEER NOT LESS THAN SEVEN (7) DAYS PRIOR TO STARTING WORK IN ORDER THAT THE ENGINEER MAY TAKE NECESSARY MEASURES TO INSURE THE PRESERVATION OF SURVEY MONUMENTS CONTRACTOR SHALL NOT DISTURB PERMANENT SURVEY MONUMENTS WITHOUT THE CONSENT OF THE ENGINEER AND SHALL NOTIFY THE ENGINEER AND BEAR THE EXPENSE OF REPLACING ANY THAT MAY BE DISTURBED WITHOUT PERMISSION REPLACEMENT SHALL BE DONE ONLY BY THE ENGINEER WHEN A CHANGE IS MADE IN THE FINISHED ELEVATION OF THE PAVEMENT OR ANY ROADWAY IN WHICH A PERMANENT SURVEY MONUMENT IS LOCATED, CONTRACTOR SHALL, AT HIS OWN EXPENSE, ADJUST THE MONUMENT COVER TO THE NEW GRADE UNLESS OTHERWISE SPECIFIED

20 MANHOLE STEPS WILL BE INSTALLED IN ALL STORM DRAIN MANHOLES AND JUNCTION BOXES AND CATCH BASINS THIS WORK SHALL BE CONSIDERED INCIDENTAL TO OTHER CONTRACT ITEMS AND NO SEPARATE MEASUREMENT OR PAYMENT SHALL BE MADE

21 BACKFILL, COMPACTION AND PAVING SHALL BE ACCORDING TO CITY OF ALBUQUERQUE STANDARD DRAWING 2465

22 SIDEWALKS AND WHEELCHAIR RAMPS WITHIN THE CURB RETURNS SHALL BE CONSTRUCTED WHEREVER A NEW CURB RETURN IS CONSTRUCTED
IF CURB IS DEPRESSED FOR A HANDICAP RAMP, THE RAMP SHALL BE CONSTRUCTED PRIOR TO ACCEPTANCE OF THE CURB AND GUTTER

23 THE CONTRACTOR SHALL USE BEAM AND CABLE SHORING, OR OTHER ADEQUATE MEANS TO SUPPORT AND PROTECT EXISTING UTILITIES AFFECTED BY THE CONTRACTORS EXCAVATION ACTIVITY ANY DAMAGE TO EXISTING UTILITIES SHALL BE PROMPTLY REPAIRED THROUGH THE CONTRACTOR AT NO COST TO THE OWNER

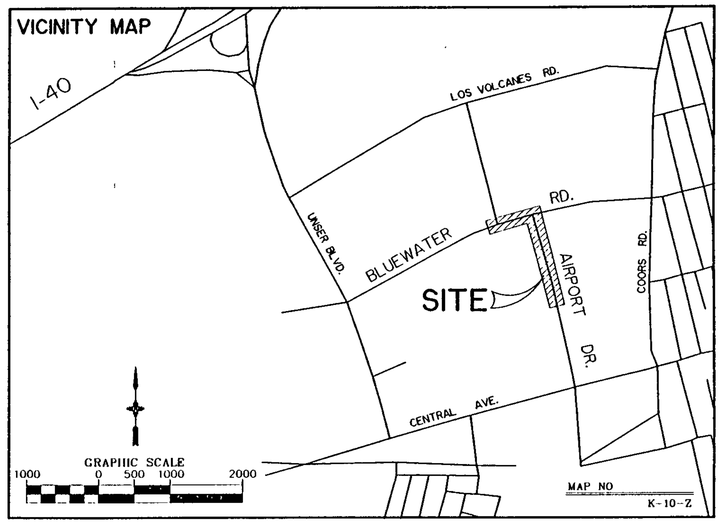
24 THE CONTRACTOR SHALL REMOVE AND REPLACE ALL SECTIONS OF EXISTING PAVING, CURB, AND GUTTER, AND OR SIDEWALK DAMAGED DURING CONSTRUCTION OF THE PROJECT WHICH ARE OUTSIDE OF THE AREAS DESIGNATED IN THE PLANS TO BE REMOVED AND REPLACED THIS WORK SHALL BE PERFORMED AT NO COST TO THE OWNER

25 ALL TRENCH EXCAVATION AND RELATED WORK SHALL BE PERFORMED IN ACCORDANCE WITH ALL APPLICABLE OSHA, STATE, AND LOCAL REGULATIONS, LAWS AND ORDINACES

ABBREVIATIONS

AC	- ASBESTOS CEMENT	DD	- DEFLECT DOWN	FO	- FIBER OPTIC CABLE	PRC	- POINT OF REVERSE CURVATURE	SAS	- SANITARY SEWER
ARV	- AIR/VACUUM RELEASE VALVE	DIP	- DUCTILE IRON PIPE	G	- GAS	PRV	- PRESSURE RELIEF VALVE	SD	- STORM DRAIN
B	- BASELINE	DU	- DEFLECT UP	HP	- HIGH PRESSURE	PT	- POINT OF TANGENCY	TC	- TOP OF CURB
BCT	- BEGIN CROWN TRANSITION	E	- EXISTING	I	- INSTALL	PUE	- PUBLIC UTILITY EASEMENT	T	- TELEPHONE
C	- CONSTRUCT	ECT	- END CROWN TRANSITION	LP	- LIGHT POLE	R/REL	- REMOVE & RELOCATE	TL	- TRAFFIC LIGHT
CAV	- COMBINATION AIR VALVE	ELEV	- ELEVATION	MH	- MANHOLE	R/RPLC	- REMOVE & REPLACE	TP	- TOP OF PIPE
CCP	- CONCRETE CYLINDER PIPE	F-F	- FACE TO FACE	NMUI	- NEW MEXICO UTILITIES, INC.	PVC	- POLY VINYL CHLORIDE	UE	- UNDERGROUND ELECTRIC
CI	- CAST IRON	F/F	- FEET/FOOT	PC	- POINT OF CURVATURE	R	- REMOVE	VCP	- VITRIFIED CLAY PIPE
CL	- CENTERLINE	FH	- FIRE HYDRANT	PCC	- POINT OF COMPOUND CURVATURE	REL	- RELOCATE	VER	- VERIFY LOCATION
COA	- CITY OF ALBUQUERQUE	FL	- FLOW LINE	POC	- POINT ON CURVE	ROW	- RIGHT-OF-WAY	W OR WL	- WATERLINE
				PP	- POWER POLE			X	- CROSSING

VICINITY MAP



SHEET INDEX

Unser Diversion LOMR
Albuquerque, New Mexico
Supporting Document #2

1 of 5	COVER
2 of 5	STORM DRAIN PLAN & PROFILE
3 of 5	STORM DRAIN PLAN & PROFILE
4 of 5	TRAFFIC CONTROL PLAN
5 of 5	TRAFFIC CONTROL SIGNING EXAMPLES

UTILITY COMPANY CONTACTS

PNM
Tom Kroliger
Alvarado square
Mail Stop 0208
Albuquerque, New Mexico 87158
(505) 848-4947

GAS CO.
Tim Cynova
4625 Lalh Blvd, NE
Albuquerque, New Mexico 87107
(505) 761-7775

US WEST COMMUNICATIONS
Becky Olesen
201 Third Street
P O Box 1355, Stu 952
Albuquerque, New Mexico 87103
(505) 245-6694

AT&T
Ishmael Pantoja
111 Third ST, NW
Albuquerque, New Mexico 87103
(505) 842-2806

JONES INTERCABLE
Karen Shore
4611 Montbel Pl, NE
P O Box 27138
Albuquerque, NM 87125-7138
(505) 761 6220

REV	SHEETS	CITY ENGINEER	DATE	USER DEPARTMENT	DATE	USER DEPARTMENT	DATE

APPROVAL OF REVISIONS

RPBirkenmeier 4/20/93

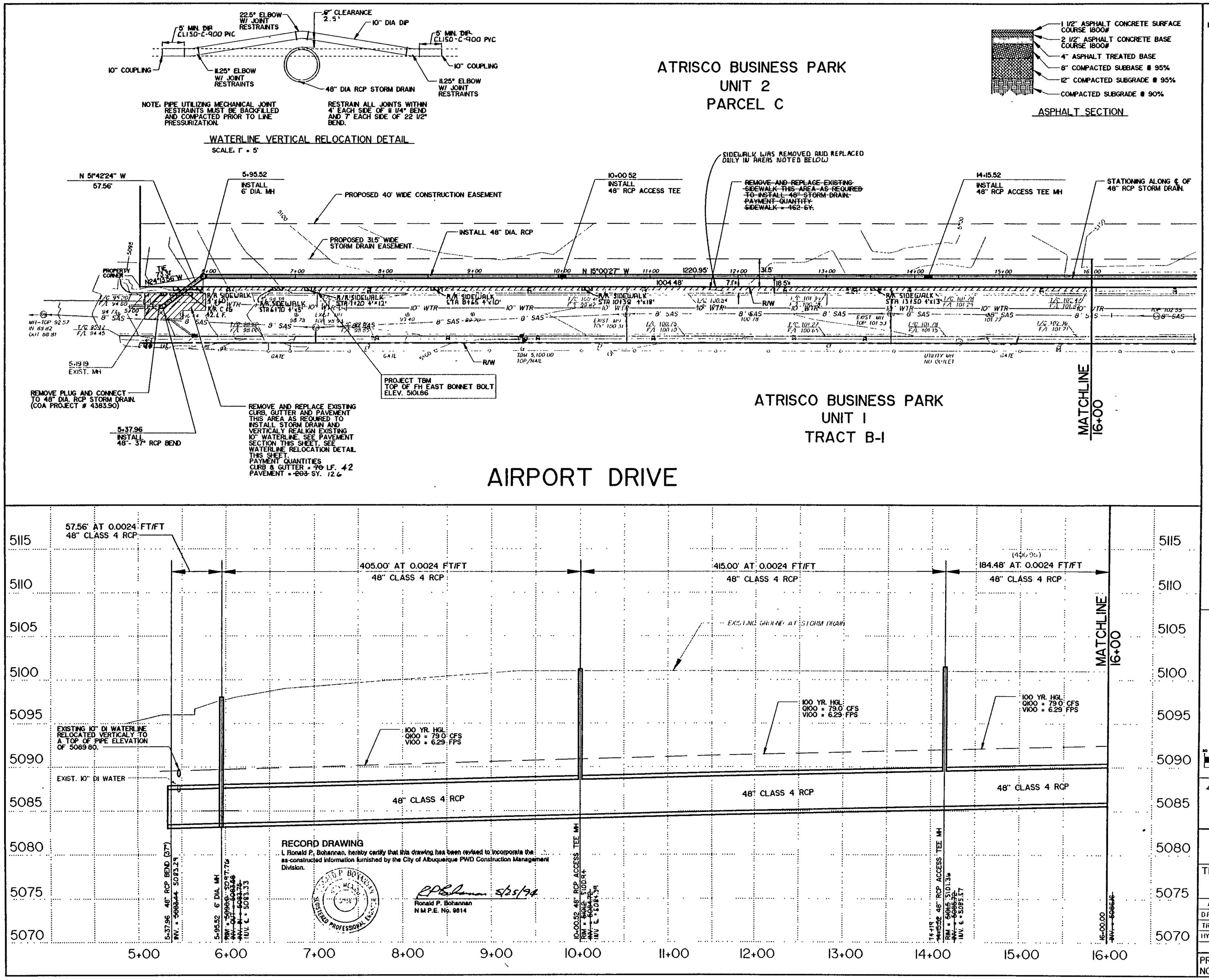
EASTERLING & ASSOCIATES, INC.
CONSULTING ENGINEERS
10151 COORS RD, NW, SUITE H - 7
ALBUQUERQUE, NEW MEXICO 87114
(505) 898-8021 FAX (505) 898-8501

PROJECT NUMBER 4383.92

APPROVED FOR CONSTRUCTION

for Ric Boyd
CITY ENGINEER DATE

SHEET 1 OF 5



NOTES:

1. REINFORCED CONCRETE PIPE WYE CONNECTIONS AND BENDS SHALL BE FACTORY FABRICATED.

LEGEND

REMOVAL AND REPLACEMENT PAYMENT AREA

EXISTING FEATURES

- FIRE HYDRANT
- WATER VALVE
- WATER METER
- SEWER MANHOLE
- UTILITY POLE
- TREE

1 inch = 50 ft. (horiz)
1 inch = 5 ft. (vert.)

EASTERLING & ASSOCIATES, INC.
CONSULTING ENGINEERS
10131 Coors Rd, NW, Suite H - 7
ALBUQUERQUE, NEW MEXICO 87114
(505) 898-8021 FAX (505) 898-8501

AS BUILT INFORMATION

CONTRACTOR		
WORK STAKED BY	C.O.A.	DATE
INSPECTORS DAILY REPORTS BY		DATE
FIELD VERIFICATION BY	C.O.A.	DATE
DRAWINGS CORRECTED BY	E.A.I.	DATE 5-94

MICRO-FILM INFORMATION

RECORDED BY	DATE
NO.	

BENCH MARKS

STATION NAME	L-40-20A
	N.M.S.H.C. BRASS TABLET LOCATED ON THE NORTH SIDE OF U.S. HWY. I-40 AND ABOUT 465 EAST OF UNSER BLVD. OVERPASS.
NORTHING	1,490,199.97
EASTING	356,926.16
ELEVATION	5165.89

SURVEY INFORMATION

FIELD NOTES

NO.	BY	DATE
TOPO	GEO SERVICE	9-92

ENGINEERS SEAL

RP Bohannan 5/25/93

NO.	DATE	REMARKS	BY
		REVISIONS	
		DESIGN	

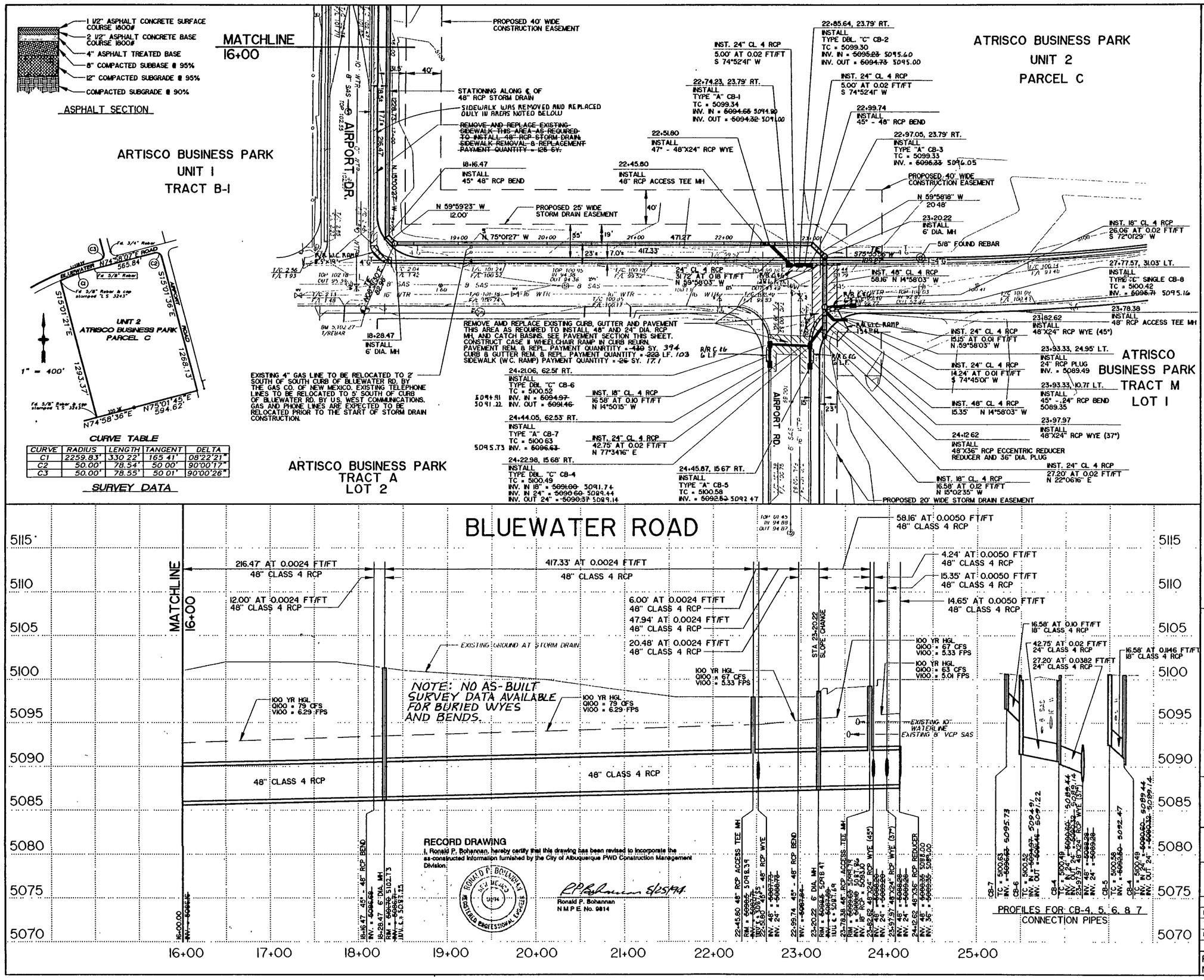
		DATE
DESIGNED BY	V.S.F. / D.E.C.	APRIL 1993
DRAWN BY	D.E.C.	APRIL 1993
CHECKED BY	V.S.F. / R.P.B.	APRIL 1993

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING GROUP

TITLE: AIRPORT DRIVE / BLUEWATER ROAD STORM DRAIN PLAN & PROFILE

APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
DRC Chair		5-17-93	WATER		4-30-93
TRANS DEV		5-03-93	WASTE WATER		4-29-93
HYDROLOGY		5-06-93	TRAF OPER		

PROJECT NO.	MAP NO.	SHEET	OF
4383.92	K-10	2	5



NOTES:

1. REINFORCED CONCRETE PIPE WYE CONNECTIONS AND BENDS SHALL BE FACTORY FABRICATED.
2. AFTER INSTALLATION OF STORM DRAIN, CONSTRUCT WHEEL CHAIR RAMP AT NORTHWEST CURB RETURN OF BLUEWATER RD. AND AIRPORT RD. PER COA STD. DWGS. 2440 AND 2441 CASE II. USE CASE II WHEEL CHAIR RAMP IF RAMP IS REQUIRED AT THE SOUTHWEST CURB RETURN OF AIRPORT DR. (EAST) AND BLUEWATER RD.
3. THE FOLLOWING APPLIES AT EXISTING PIPE CROSSINGS WITH NEW STORM DRAIN.
   REMOVE AND REPLACE EXISTING SAS WITH 12' SECTION OF PVC SDR 35 CENTERED ON NEW STORM DRAIN.
   IF WATERLINE IS AC PIPE - REMOVE AND REPLACE A 20' SECTION OF PVC C-900 PIPE CENTERED ON 48" RCP.

LEGEND

REMOVAL AND REPLACEMENT PAYMENT AREA

EXISTING FEATURES

- FIRE HYDRANT
- WATER VALVE
- WATER METER
- SEWER MANHOLE
- UTILITY POLE
- TREE

1 inch = 6 ft. (vert.)

1 inch = 50 ft. (horz.)

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INSPECTOR ACCEPTANCE BY		DATE
FIELD VERIFICATION BY	C.O.A.	DATE
DRAWINGS CORRECTED BY	E.A.I.	DATE 5-94

MICRO-FILM INFORMATION

RECORDED BY	DATE
NO	

BENCH MARKS

STATION NAME: I-40-20 A
NM.S.H.C. BRASS TABLET LOCATED ON THE NORTH SIDE OF U.S. HWY. I-40 AND ABOUT 465' EAST OF UNSER BLVD. OVERPASS.
NORTHING: 1,490,199.97
EASTING: 356,926.16
ELEVATION: 5165.89

SURVEY INFORMATION

FIELD NOTES

NO.	BY	DATE
TOPO	GEO SERVICE	9-92

ENGINEERS SEAL

NO.	DATE	REMARKS	BY
		REVISIONS	

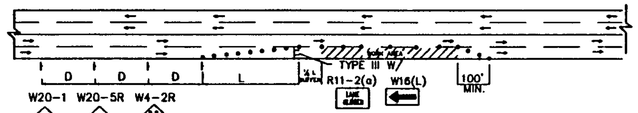
		DATE
DESIGNED BY	V.S.F. / D.E.C.	APRIL 1993
DRAWN BY	D.E.C.	APRIL 1993
CHECKED BY	V.S.F. / R.P.B.	APRIL 1993

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING GROUP

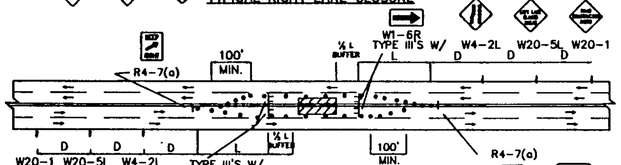
TITLE: AIRPORT DRIVE / BLUEWATER ROAD STORM DRAIN PLAN & PROFILE

APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
DRC Chair	J.A. Bradley	5-17-93	WATER	William Baker	4-29-93
TRANS DEV	[illegible]	5-02-93	WASTE WATER	William Baker	4-29-93
HYDROLOGY	[illegible]	5-06-93			

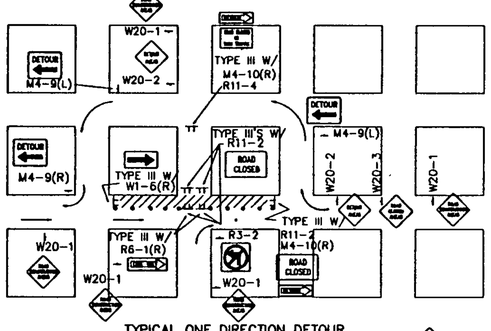
PROJECT NO.	MAP NO.	SHEET	OF
4383.92	K-10	3	5



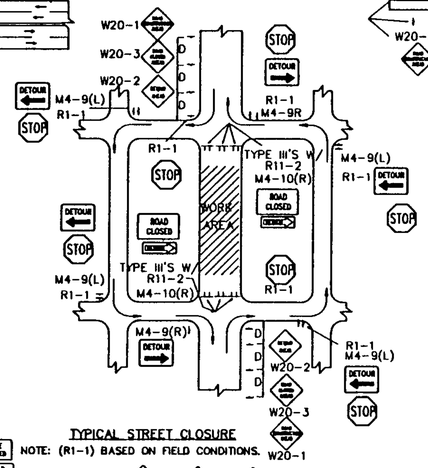
TYPICAL RIGHT LANE CLOSURE



TYPICAL LEFT LANE CLOSURE

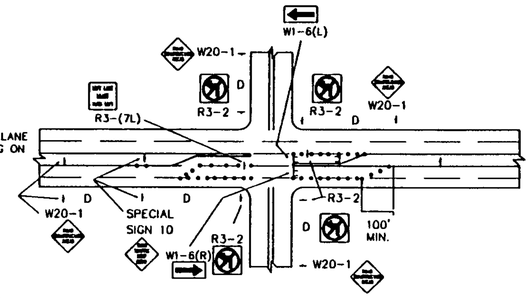


TYPICAL ONE DIRECTION DETOUR



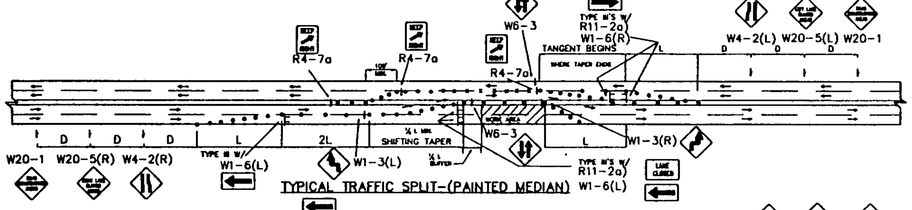
TYPICAL STREET CLOSURE

NOTE: (R1-1) BASED ON FIELD CONDITIONS.

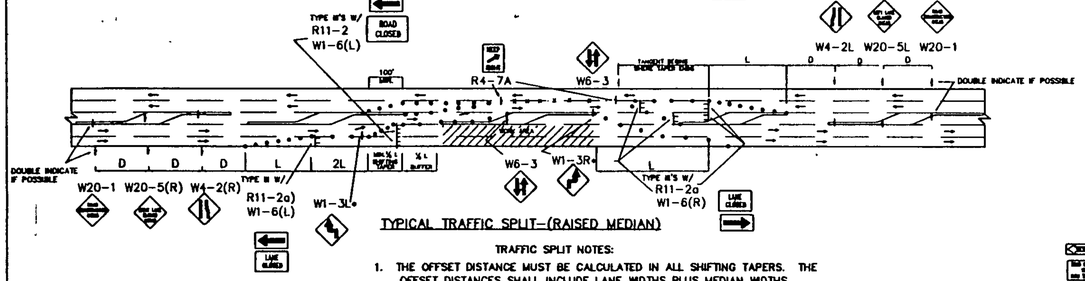


TYPICAL LANE CLOSURE AT INTERSECTION

NOTE: DEPENDING ON WORK ZONE LOCATION



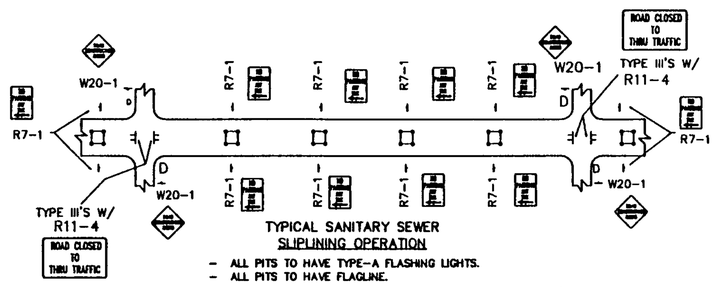
TYPICAL TRAFFIC SPLIT-(PAINTED MEDIAN)



TYPICAL TRAFFIC SPLIT-(RAISED MEDIAN)

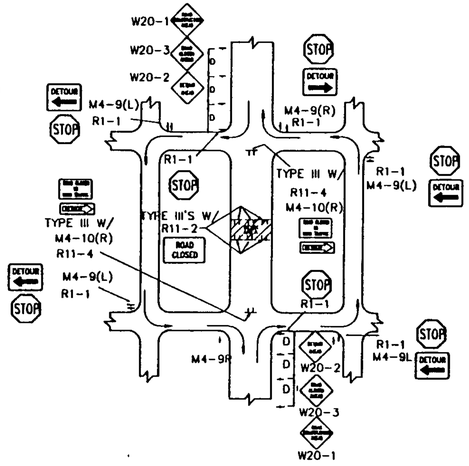
TRAFFIC SPLIT NOTES:

1. THE OFFSET DISTANCE MUST BE CALCULATED IN ALL SHIFTING TAPERS. THE OFFSET DISTANCES SHALL INCLUDE LANE WIDTHS PLUS MEDIAN WIDTHS.
2. ½ L IS MINIMUM DISTANCE FOR SHIFTING TAPERS.
3. REVERSE CURVES MAY BE IMPLEMENTED. ALL CURVE DATA SHALL BE CALCULATED.
4. MEDIAN REMOVAL SHALL BE REQUIRED IF ½ L OR REVERSE CURVE IS NOT SUFFICIENT. MEDIAN REMOVAL SHALL TAKE PLACE BEFORE SPLITS.
5. REDUCED SPEED MAY BE CONSIDERED.
6. • USE 1-3 FOR 30 MPH OR LESS, W1-4 FOR SPEED 35 MPH OR GREATER.



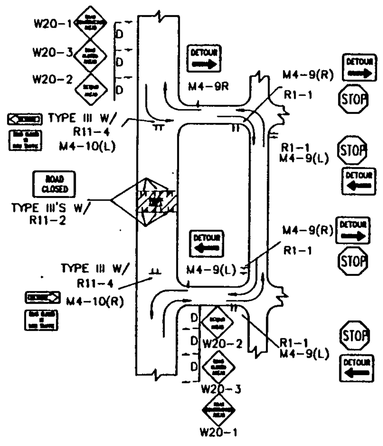
TYPICAL SANITARY SEWER
SLIPLINING OPERATION

- ALL PITS TO HAVE TYPE-A FLASHING LIGHTS.
- ALL PITS TO HAVE FLAGLINE.



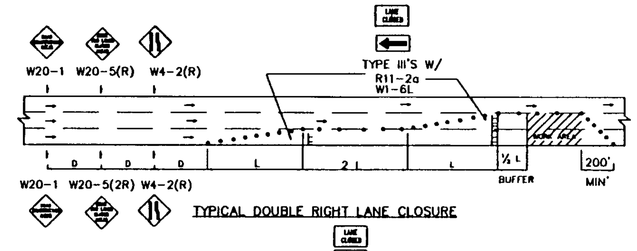
TYPICAL MID-BLOCK CLOSURE

NOTE: (R1-1) BASED ON FIELD CONDITIONS.

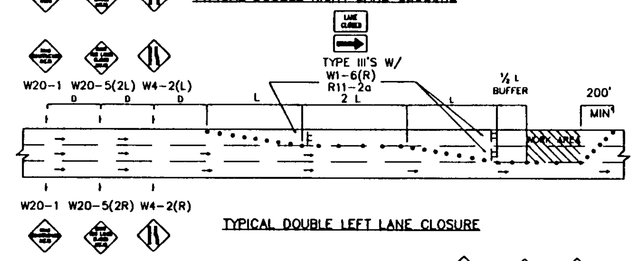


TYPICAL STREET CLOSURE

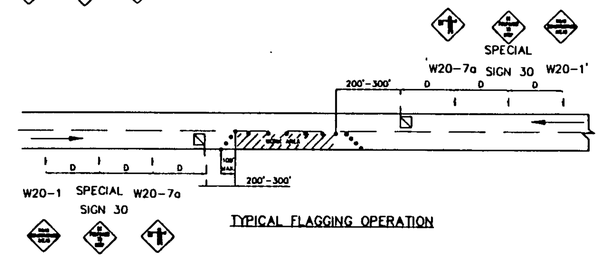
NOTE: (R1-1) BASED ON FIELD CONDITIONS.



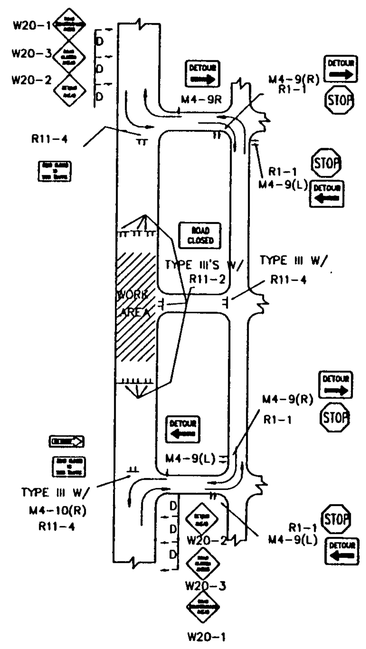
TYPICAL DOUBLE RIGHT LANE CLOSURE



TYPICAL DOUBLE LEFT LANE CLOSURE

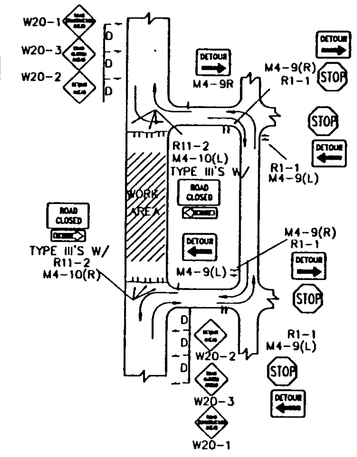


TYPICAL FLAGGING OPERATION



TYPICAL STREET CLOSURE

NOTE: (R1-1) BASED ON FIELD CONDITIONS.



TYPICAL STREET CLOSURE

NOTE: (R1-1) BASED ON FIELD CONDITIONS.

AS BUILT INFORMATION
CONTRACTOR DATE
WORK STAKED BY DATE
INSPECTOR'S ACCEPTANCE BY DATE
FIELD VERIFICATION BY DATE
DRAWINGS CORRECTED BY DATE
MICRO-FILM INFORMATION
RECORDED BY DATE
NO.

BENCH MARKS

SURVEY INFORMATION
FIELD NOTES
NO. BY DATE

ENGINEER'S SEAL

NO.	DATE	REMARKS	BY
		REVISIONS	

DESIGNED BY RICARDO ROYBAL, P.E. DATE NOV. 1991
DRAWN BY C.A.D.D./W.L.B./A.F.V. DATE NOV. 1991
CHECKED BY DATE

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING GROUP

TITLE: ATRISCO BUSINESS PARK
AIRPORT DR./BLUEWATER RD. STORM DRAIN
TYPICAL TRAFFIC CONTROL & SIGNING EXAMPLES (REF. M.U.T.C.D.)

APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
DRC CHAIRMAN	B.J. Stockly	5-17-93	WATER	NA	4-29-93
TRANSPORTATION	[illegible]	5-03-93	WASTE WATER	NA	4-29-93
HYDROLOGY	G. Allen	5-06-93			

PROJECT NO.	MAP NO.	SHEET	OF
4383.92	K-10	4	5

DC-13-92
CTYSTD2.DWG

CONSTRUCTION TRAFFIC CONTROL GENERAL NOTES

1. CONTRACTOR MUST OBTAIN FROM CONSTRUCTION COORDINATION AN EXCAVATION/BARRICADING PERMIT BEFORE ENGAGING IN ANY CONSTRUCTION, MAINTENANCE OR REPAIR WORK IN ANY OF THE CITY OF ALBUQUERQUE'S RIGHTS-OF-WAY. EMERGENCY WORK THAT WOULD PRESERVE LIFE OR PROPERTY IS EXCLUDED WITH THE UNDERSTANDING, THAT A PERMIT SHALL BE OBTAINED WITHIN 24 TO 48 HOURS.

2. CONTRACTOR SHALL AT THE TIME OF PERMIT REQUEST, SUBMIT FOR APPROVAL BY CONSTRUCTION COORDINATION, A TRAFFIC CONTROL PLAN DETAILING ALL EXISTING TOPOGRAPHY SUCH AS LANE WIDTHS, DRIVEWAYS, AND BUSINESS/RESIDENTIAL ACCESSES. THE TRAFFIC CONTROL PLAN SHALL INCLUDE ALL PHASES OF WORK AND SCHEDULES INVOLVED IN THE CONSTRUCTION PROJECT. ANY SEPARATE PHASES OF A CONSTRUCTION PROJECT SHALL BE GIVEN AN INDIVIDUAL PERMIT EACH. BLANKET PERMITS WILL NOT BE ISSUED.

3. THESE TYPICAL TRAFFIC CONTROL PLANS DO NOT REFLECT THE EXISTING TOPOGRAPHY SUCH AS DRIVEWAYS, LANE WIDTHS, AND BUSINESS/RESIDENTIAL ACCESSES. EVERY LOCATION THAT REQUIRES CONSTRUCTION TRAFFIC CONTROL SHALL HAVE A DETAILED TRAFFIC CONTROL PLAN SHOWING ALL EXISTING TOPOGRAPHY.

4. CONSTRUCTION SHALL NOT BEGIN UNLESS A TRAFFIC CONTROL PLAN HAS BEEN APPROVED AND VERIFIED BY CONSTRUCTION COORDINATION.

5. CONSTRUCTION COORDINATION SHALL BE NOTIFIED 48 HOURS PRIOR TO ANY TRAFFIC CONTROL CHANGES NEEDED BY CONTRACTOR, THAT WERE NOT PREVIOUSLY APPROVED. THESE TRAFFIC CONTROL CHANGES SHALL BE REQUESTED IN WRITING ACCOMPANIED WITH A TRAFFIC CONTROL PLAN REFLECTING SUCH CHANGES.

6. ALL CONSTRUCTION TRAFFIC CONTROL DEVICES SHALL COMPLY TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), LATEST EDITION. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO INSTALL, SERVICE AND MAINTAIN ALL TRAFFIC CONTROL DEVICES. TRAFFIC CONTROL DEVICES SHALL NOT BE REMOVED OR ALTERED IN ANY WAY WITHOUT THE APPROVAL OF CONSTRUCTION COORDINATION, PER SECTION 6A-4 OF THE MUTCD, LATEST EDITION.

7. THE CONSTRUCTION TRAFFIC CONTROL INITIAL SET-UP SHALL BE BY AN AMERICAN TRAFFIC SAFETY SERVICES ASSOCIATION (ATSSA) CERTIFIED WORKSITE TRAFFIC SUPERVISOR. THE MAINTENANCE AND SERVICING SHALL ALSO BE DONE BY AN ATSSA CERTIFIED WORKSITE TRAFFIC SUPERVISOR OR EQUIVALENT.

8. CONTRACTOR IS RESPONSIBLE TO MAINTAIN AND SERVICE ALL TRAFFIC CONTROL DEVICES 24 HOURS A DAY, 7 DAYS A WEEK THROUGHOUT LENGTH OF PROJECT. CONTRACTOR IS RESPONSIBLE THAT ALL TRAFFIC CONTROL DEVICES COMPLY WITH THE MUTCD, LATEST EDITION.

9. ALL ADVANCE WARNING SIGNS SHALL BE DOUBLE INDICATED WHENEVER THERE ARE MULTI-LANE TRAFFIC IN ANY ONE GIVEN DIRECTION AND THERE IS SUFFICIENT MEDIAN SPACE.

10. ALL BARRICADES IN ALL TAPERS AND TANGENTS SHALL BE PLACED APART, A DISTANCE MEASURED IN FEET, EQUAL TO THAT OF THE POSTED SPEED LIMIT. NO EXCEPTIONS UNLESS APPROVED BY CONSTRUCTION COORDINATION PER MUTCD SECTION 6A-4.

11. CONTRACTOR SHALL NOT BEGIN WORK BEFORE 8:30 A.M. OR END WORK AFTER 4:00 P.M. WITHOUT THE APPROVAL OF CONSTRUCTION COORDINATION.

12. CONTRACTOR IS RESPONSIBLE TO PROVIDE CONSTRUCTION COORDINATION, A WEEKLY LOG OF DAILY INSPECTIONS OF BARRICADE AND MAINTENANCE SCHEDULES ON PROJECTS THAT ARE OVER ONE WEEK DURATION.

13. EQUIPMENT OR MATERIALS SHALL NOT BE STORED WITHIN 15 FEET OF A TRAVELLED TRAFFIC LANE DURING NON-WORKING HOURS WITHOUT THE APPROVAL OF CONSTRUCTION COORDINATION.

14. CONTRACTOR SHALL PROVIDE AND MAINTAIN A SAFE AND ADEQUATE MEANS OF CHANNELIZING PEDESTRIAN TRAFFIC AROUND AND THROUGH THE CONSTRUCTION AREA.

15. CONTRACTOR IS RESPONSIBLE FOR OBLITERATION OF ANY CONFLICTING STRIPING AND RESPONSIBLE FOR ALL TEMPORARY STRIPING.

16. CONTRACTOR SHALL MAINTAIN ACCESS TO ALL FACILITIES, BUSINESSES AND/OR RESIDENTS AT ALL TIMES.

17. CONTRACTOR SHALL PROVIDE ACCESS SIGNS FOR BUSINESSES LOCATED WITHIN THE CONSTRUCTION AREA UNDER THE SUPERVISION OF CONSTRUCTION COORDINATION. EACH ACCESS SIGN SHALL HAVE 5 INCH, WHITE OPAQUE LETTERING ON BLUE REFLECTORIZED BACKGROUND. ACCESS SIGNS SHALL BE CONSIDERED INCIDENTAL TO THE BID AND NOT PART OF THE CONTRACT UNLESS OTHERWISE STATED. NO MORE THAN 3 BUSINESSES SHALL BE LISTED ON A ACCESS SIGN. SHOPPING CENTERS AND MALLS SHALL BE LISTED AS SUCH.

18. ALL ADVANCE WARNING SIGNS SHALL MEET THE MINIMUM REFLECTIVE INTENSITY REQUIREMENTS SET FORTH BY THE CITY OF ALBUQUERQUE. CONSTRUCTION COORDINATION SHALL DETERMINE ALL REQUIREMENTS AND APPROVE OR DISAPPROVE ANY ADVANCE WARNING SIGN PER SECTION 6A-4 OF THE MUTCD, LATEST EDITION.

19. 24 HOURS PRIOR TO OCCUPYING OR CLOSING OF A RIGHT-OF-WAY, CONTRACTOR SHALL NOTIFY: POLICE, FIRE DEPARTMENT, SCHOOLS, HOSPITALS, TRANSIT AUTHORITY, BUSINESSES AND/OR RESIDENTS THAT WILL BE AFFECTED BY THE CONSTRUCTION.

20. ANY FIELD ADJUSTMENTS SHALL BE APPROVED BY CONSTRUCTION COORDINATION.

21. EXCAVATIONS SHALL BE PLATED, TEMPORARILY PATCHED OR RESURFACED PRIOR TO OPENING OF TRAFFIC. A MINIMUM OF 11 FEET SHALL BE PROVIDED FOR TRAFFIC IN ANY GIVEN DIRECTION. CONTRACTOR IS RESPONSIBLE FOR ANY WORK INVOLVED IN SATISFYING THESE REQUIREMENTS.

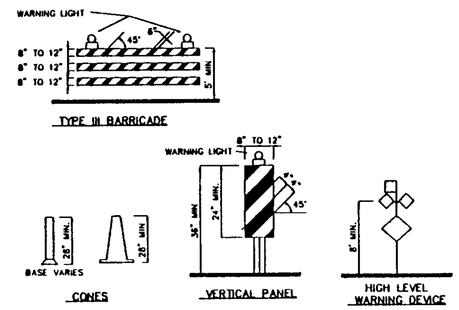
22. CONTRACTOR SHALL AT ALL TIMES COMPLY WITH THE FOLLOWING:
    1. STANDARDS AND REQUIREMENTS SET FORTH IN THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION.
    2. THE CITY OF ALBUQUERQUE TRAFFIC CODE, LATEST EDITION.
    3. SECTION 19 OF THE CITY OF ALBUQUERQUE'S STANDARD SPECIFICATIONS FOR PUBLIC WORK CONSTRUCTION, AS WELL AS OTHER SECTIONS.

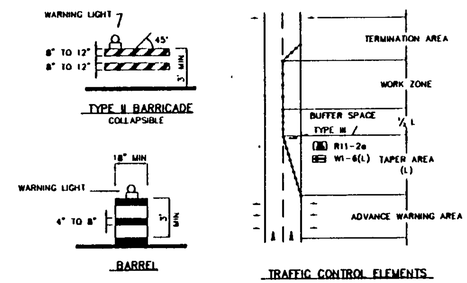
23. FAILURE TO COMPLY WITH ANY OF THE ABOVE MENTIONED, WILL BE ADEQUATE CAUSE TO CEASE ALL WORK ON ANY CONSTRUCTION PROJECT. WORK WILL NOT RESUME UNTIL ALL REQUIREMENTS ARE ADDRESSED AND APPROVED BY CONSTRUCTION COORDINATION.

24. ALL TRAFFIC CONTROL DEVICES SHALL BE KEPT IN NEW-CLEAN CONDITION. WASHING OF EQUIPMENT IS INCIDENTAL TO IT'S PLACEMENT AND MAINTENANCE.

25. TRAFFIC CONTROL STANDARDS APPLY ONLY WHERE THE CONSTRUCTION TRAFFIC CONTROL PLANS ARE NOT SPECIFIC.

PROJECT CONSTRUCTION TRAFFIC CONTROL GENERAL NOTES





LEGEND

- WORK AREA
- BARRICADE – TYPE I, TYPE II, OR BARREL
- BARRICADE – TYPE III
- VERTICAL PANEL
- WARNING SIGN
- D — DISTANCE BETWEEN SIGNS – A DISTANCE MEASURED IN FEET EQUAL TO A VALUE OF TEN TIMES THE SPEED LIMIT OF THE STREET
- FLAGMAN POSITION
- S — SPACING BETWEEN BARRICADES– A DISTANCE MEASURED IN FEET EQUAL TO THE SPEED LIMIT OF THE STREET
- L — TAPER LENGTH – SEE CHART BELOW

THE TANGENT LENGTH IS EQUAL TO THE TAPER LENGTH FOR A GIVEN STREET.

TAPER REQUIREMENTS

SPEED LIMIT (MPH)	TAPER LENGTH (FEET) 10' LANE	11' LANE	12' LANE	MINIMUM NUMBER OF DEVICES FOR TAPER	MAXIMUM DEVICE SPACING IN FEET ALONG TAPER	AFTER TAPER
20	70	75	80	5	20	20
25	105	115	125	6	25	25
30	150	165	180	7	30	30
35	205	225	245	8	35	35
40	270	295	320	9	40	40
45	450	495	540	13	45	45
50	500	550	600	13	50	50
55	550	605	660	13	55	55

RECOMMENDED SIGN SPACING FOR ADVANCE WARNING SIGN SERIES

SPEED MILES PER HOUR	MINIMUM DISTANCE IN FEET BETWEEN SIGNS	FROM LAST SIGN TO TAPER
0-20	10 X SPEED LIMIT	10 X SPEED LIMIT
25-30	10 X SPEED LIMIT	10 X SPEED LIMIT
30-35	10 X SPEED LIMIT	10 X SPEED LIMIT
40-45	10 X SPEED LIMIT	10 X SPEED LIMIT
50-60	10 X SPEED LIMIT	10 X SPEED LIMIT

TAPER CRITERIA

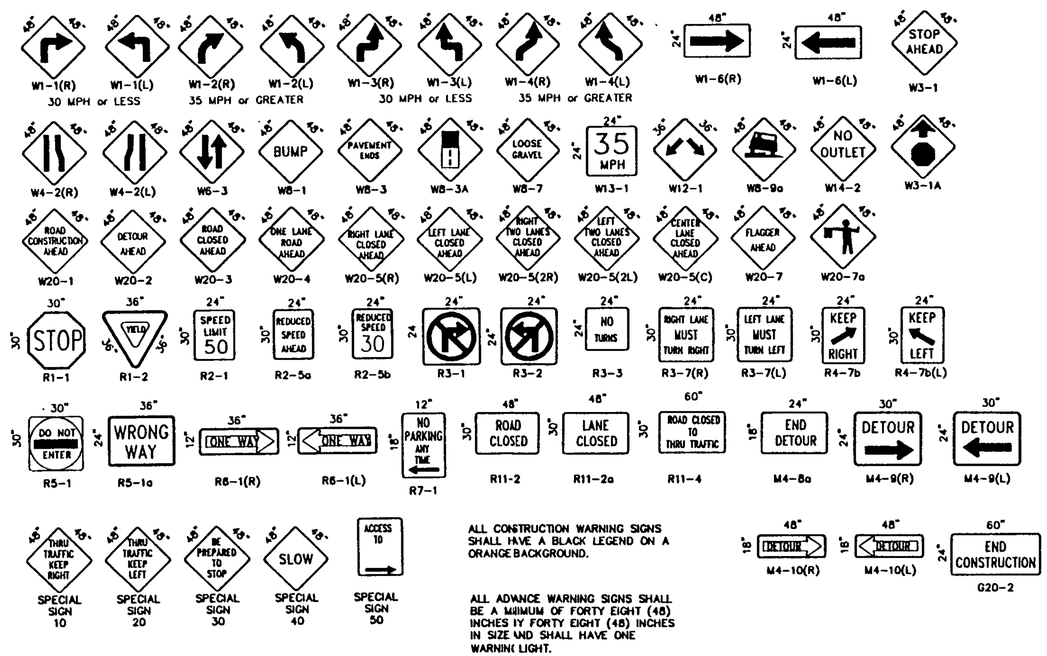
TYPE OF TAPER	TAPER LENGTH
UPSTREAM TAPER:	
MERGING TAPER	L MINIMUM
SHIFTING TAPER	1/2 L MINIMUM
SHOULDER TAPER	1/3 L MINIMUM
TWO-WAY TRAFFIC TAPER	100 FEET MAXIMUM
DOWNSTREAM TAPERS	100 FEET PER LANE

TAPER LENGTH COMPUTATION

SPEED LIMIT	
40 MPH OR LESS	$L = \frac{WS^2}{60}$
45 MPH OR GREATER	$L = W \times S$

L = TAPER LENGTH
W = WIDTH OF OFFSET IN FEET
S = POSTED SPEED OR OFF-PEAK 85-PERCENTILE SPEED IN MPH

SIGN FACE DETAILS



ALL CONSTRUCTION WARNING SIGNS SHALL HAVE A BLACK LEGEND ON A ORANGE BACKGROUND.

ALL ADVANCE WARNING SIGNS SHALL BE A MIIMUM OF FORTY EIGHT (48) INCHES IY FORTY EIGHT (48) INCHES IN SIZE ND SHALL HAVE ONE WARNINC LIGHT.

AS BUILT INFORMATION — CONTRACTOR / WORK STAKED BY / INSPECTOR'S ACCEPTANCE BY / FIELD VERIFICATION BY / DRAWINGS CORRECTED BY — DATE

MICRO-FILM INFORMATION — RECORDED BY / DATE / NO.

BENCH MARKS

SURVEY INFORMATION — FIELD NOTES — NO. / BY / DATE

ENGINEER'S SEAL

NO.	DATE	REMARKS	BY

REVISIONS

DESIGN

DESIGNED BY RICARDO ROYBAL, P.E. DATE AUG. 1992
DRAWN BY CADD.- A.F.V. DATE AUG. 1992
CHECKED BY DATE

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING GROUP

TITLE: ATRISCO BUSINESS PARK
AIRPORT DR./BLUEWATER RD. STORM DRAIN
SIGNING AND CONSTRUCTION TRAFFIC CONTROL STANDARDS

APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
DRC CHAIRMAN		5-17-93	WATER	NA	4-29-93
TRANSPORTATION		5-03-93	WASTE WATER	NA	4-29-93
HYDROLOGY		5-06-93			

PROJECT NO.	MAP NO.	SHEET	OF
4383.92	K-10	5	5

08-11-92
CTSSTD1.DWG (1=1")

Unser Diversion LOMR
Albuquerque, New Mexico
Supporting Document #2

CONSTRUCTION PLANS
FOR
AIRPORT DRIVE STORM DRAIN OUTFALL
(THE COORS UPGRADE)

OCTOBER, 1992

PREPARED FOR

SUNWEST BANK
SPECIAL ASSETS DEPARTMENT

GENERAL NOTES

1. ALL WORK DETAILED ON THESE PLANS, EXCEPT AS OTHERWISE STATED OR PROVIDED HEREON, SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION - 1986 EDITION.

2. TWO (2) WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTACT ONE CALL SYSTEM, INC., 260-1990, FOR LOCATION OF EXISTING UTILITIES.

3. THESE DRAWINGS REFLECT INFORMATION ON UTILITIES GATHERED BY SITE INSPECTION, DISCUSSIONS WITH MUNICIPAL OFFICIALS, AND PREVIOUS CONSTRUCTION DRAWINGS. IT IS POSSIBLE THAT THE EXACT LOCATION OF LINES AND UTILITY CONNECTION POINTS IN THE VICINITY OF THE REQUIRED WORK MAY BE DIFFERENT FROM THE LOCATION SHOWN ON THESE DRAWINGS. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE HORIZONTAL AND VERTICAL LOCATIONS OF ALL OBSTRUCTIONS. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER SO THAT THE CONFLICT CAN BE RESOLVED WITH A MINIMUM AMOUNT OF DELAY.

4. ALL GAS, ELECTRIC, TELEPHONE LINES, CABLES, AND APPURTENANCES ENCOUNTERED DURING CONSTRUCTION THAT REQUIRE RELOCATION SHALL BE RELOCATED BY THE RESPECTIVE UTILITY. CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION OF ALL NECESSARY UTILITY RELOCATION AND ADJUSTMENTS TO GRADE.

5. IT WILL BE THE CONTRACTOR'S RESPONSIBILITY TO PROTECT AND MAINTAIN IN SERVICE ALL EXISTING UTILITIES.

6. ALL WORK ON THIS PROJECT SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE, AND LOCAL LAWS, RULES, AND REGULATIONS CONCERNING CONSTRUCTION SAFETY AND HEALTH. THESE DRAWINGS DO NOT INCLUDE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY WHICH SHALL REMAIN THE CONTRACTOR'S RESPONSIBILITY.

7. ALL EXCAVATION/CONSTRUCTION PERMITS WILL BE REQUIRED BEFORE BEGINNING ANY WORK WITHIN THE CITY RIGHT-OF-WAY. AN APPROVED COPY OF THESE PLANS MUST BE SUBMITTED AT THE TIME OF APPLICATION FOR PERMITS.

8. THE CONTRACTOR SHALL EXERCISE REASONABLE CARE DURING CONSTRUCTION TO PREVENT THE MOVEMENT OF SEDIMENT FROM THE SITE INTO EXISTING STREETS. LOOSE SOIL STOCKPILES DURING CONSTRUCTION ACTIVITIES SHALL BE PROMPTLY CLEANED UP OR PROTECTED FROM BEING CARRIED DOWNSTREAM BY FLOWING WATER

9. ALL UNPAVED AREAS DISTURBED BY THE CONTRACTORS WORK SHALL BE REVEGATATED IN ACCORDANCE WITH SECTION 1011 OF THE CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS. SEEDING CLASS SHALL BE CLASS A. NO FERTILIZER OR SUPPLIMENTARY WATERING IS REQUIRED. SEED MIX SHALL CONSIST OF #830 DRYLAND BLEND APPLIED AT 13 LBS./ACRE.

10. DISPOSAL OF ALL WASTE MATERIAL SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AS SPECIFIED IN SECTION 614 OF THE GENERAL CONDITIONS IN THE CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION - 1986 EDITION

11. A DISPOSAL SITE FOR ALL EXCESS EXCAVATION MATERIAL, ASPHALTIC PAVING, CONCRETE CURBS AND SIDEWALKS, ETC., SHALL BE OBTAINED BY THE CONTRACTOR IN COMPLIANCE WITH APPLICABLE ENVIRONMENTAL REGULATIONS AND APPROVED BY THE FIELD ENGINEER. ALL COSTS INCURRED IN OBTAINING A DISPOSAL SITE AND HAUL THERETO SHALL BE CONSIDERED INCIDENTAL TO THE PROJECT AND NO SEPARATE MEASUREMENT OR PAYMENT SHALL BE MADE.

12. THE CONTRACTOR WILL BE REQUIRED TO CONFINE HIS WORK TO WITHIN THE CONSTRUCTION LIMITS AND/OR PUBLIC RIGHT-OF-WAY TO PRESERVE EXISTING VEGETATION AND PRIVATE PROPERTY. THE CONTRACTOR SHALL NOT STORE ANY EQUIPMENT OR MATERIAL WITHIN THE RIGHT-OF-WAY UNLESS THE EQUIPMENT OR MATERIAL IS PROPERLY SHIELDED UTILIZING CURRENT SAFETY DESIGN AND INSTALLATION METHODS. THE SAFETY DESIGN FOR THIS SHIELDING SHALL BE PROVIDED BY THE CONTRACTOR AND MUST BE APPROVED BY THE ENGINEER BEFORE IMPLEMENTING. THERE WILL BE NO DIRECT MEASUREMENT OR PAYMENT FOR THE DESIGN, MATERIALS, INSTALLATION, AND REMOVAL OF THE SAFETY BARRIER.

13. CONTRACTOR SHALL MAINTAIN ACCESS TO ADJACENT PROPERTIES DURING CONSTRUCTION.

14. CONTRACTOR SHALL COORDINATE WITH THE CITY OF ALBUQUERQUE WATER SYSTEMS DIVISION A MINIMUM OF THREE (3) WORKING DAYS PRIOR TO INITIATING ANY WORK AFFECTING ANY EXISTING PUBLIC OR PRIVATE WATERLINES.

15. WHEN ABUTTING NEW PAVEMENT TO EXISTING, SAWCUT EXISTING PAVEMENT TO A STRAIGHT EDGE AND AT A RIGHT ANGLE, OR AS APPROVED BY THE PROJECT ENGINEER, TO REMOVE ANY BROKEN OR CRACKED PAVEMENT. A TACK COAT SHALL BE APPLIED TO THE EDGE OF ALL SAWCUT PAVEMENT PRIOR TO INSTALLATION OF ADJOINING ASPHALT PAVEMENT.

16. A MINIMUM OF THREE (3) WORKING DAYS PRIOR TO COMMENCING CONSTRUCTION, THE CONTRACTOR SHALL SUBMIT A DETAILED CONSTRUCTION SCHEDULE AND A CONSTRUCTION SIGNING AND BARRICADE PLAN TO CONSTRUCTION COORDINATION. TWO (2) WORKING DAYS PRIOR TO COMMENCING CONSTRUCTION, THE CONTRACTOR SHALL OBTAIN A BARRICADING PERMIT FROM THE TRAFFIC ENGINEERING DIVISION. CONTRACTOR SHALL NOTIFY BARRICADE ENGINEER (768-2551) PRIOR TO OCCUPYING AN INTERSECTION.

17. THE CONTRACTOR SHALL REPLACE ANY PERMANENT PAVEMENT MARKINGS AND OR TRAFFIC SIGNS WHICH ARE DAMAGED OR REMOVED DURING CONSTRUCTION OF THIS PROJECT.

18. THIS DOCUMENT, AND THE IDEAS AND DESIGNS INCORPORATED HEREIN, ARE INTENDED FOR USE ON THIS PROJECT AND IS NOT TO BE USED, IN WHOLE OR IN PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF EASTERLING & ASSOCIATES, INC. IN THE EVENT OF UNAUTHORIZED USE, THE USER ASSUMES ALL RESPONSIBILITY AND LIABILITY WHICH RESULTS.

19. CONTRACTOR SHALL NOTIFY THE ENGINEER NOT LESS THAN SEVEN (7) DAYS PRIOR TO STARTING WORK IN ORDER THAT THE ENGINEER MAY TAKE NECESSARY MEASURES TO INSURE THE PRESERVATION OF SURVEY MONUMENTS. CONTRACTOR SHALL NOT DISTURB PERMANENT SURVEY MONUMENTS WITHOUT THE CONSENT OF THE ENGINEER AND SHALL NOTIFY THE ENGINEER AND BEAR THE EXPENSE OF REPLACING ANY THAT MAY BE DISTURBED WITHOUT PERMISSION. REPLACEMENT SHALL BE DONE ONLY BY THE ENGINEER. WHEN A CHANGE IS MADE IN THE FINISHED ELEVATION OF THE PAVEMENT OR ANY ROADWAY IN WHICH A PERMANENT SURVEY MONUMENT IS LOCATED, CONTRACTOR SHALL, AT HIS OWN EXPENSE, ADJUST THE MONUMENT COVER TO THE NEW GRADE UNLESS OTHERWISE SPECIFIED.

20. MANHOLE STEPS WILL BE INSTALLED IN ALL STORM DRAIN MANHOLES AND JUNCTION BOXES AND CATCH BASINS. THIS WORK SHALL BE CONSIDERED INCIDENTAL TO OTHER CONTRACT ITEMS AND NO SEPARATE MEASUREMENT OR PAYMENT SHALL BE MADE.

21. BACKFILL, COMPACTION AND PAVING SHALL BE ACCORDING TO CITY OF ALBUQUERQUE STANDARD DRAWING 2465

22. SIDEWALKS AND WHEELCHAIR RAMPS WITHIN THE CURB RETURNS SHALL BE CONSTRUCTED WHEREVER A NEW CURB RETURN IS CONSTRUCTED. IF CURB IS DEPRESSED FOR A HANDICAP RAMP, THE RAMP SHALL BE CONSTRUCTED PRIOR TO ACCEPTANCE OF THE CURB AND GUTTER.

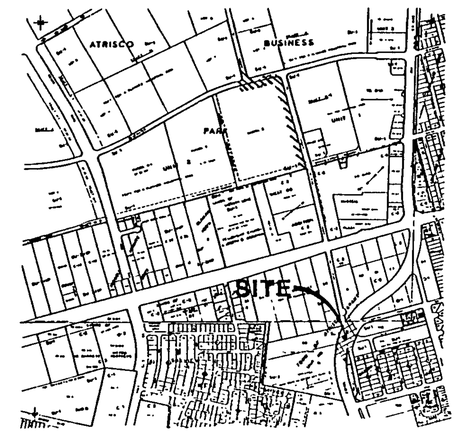
23. THE CONTRACTOR SHALL SUPPORT AND PROTECT EXISTING UTILITIES AFFECTED BY THE CONTRACTORS EXCAVATION ACTIVITY IN A MANNER ACCEPTABLE TO THE RESPECTIVE UTILITIES. ANY DAMAGE TO EXISTING UTILITIES SHALL BE REPAIRED BY THE UTILITY AT THE CONTRACTORS EXPENSE.

24. THE CONTRACTOR SHALL REMOVE AND REPLACE ALL SECTIONS OF EXISTING PAVING, CURB, AND GUTTER, AND OR SIDEWALK DAMAGED DURING CONSTRUCTION OF THE PROJECT WHICH ARE OUTSIDE OF THE AREAS DESIGNATED IN THE PLANS TO BE REMOVED AND REPLACED. THIS WORK SHALL BE PERFORMED AT NO COST TO THE OWNER. THE CONTRACTOR SHALL BE RESPONSABLE FOR ALL SURVEYING AND STAKING REQUIRED TO REMOVE AND REPLACE CURB AND GUTTER WHICH IS OUTSIDE OF THE PAYMENT LIMITS DESIGNATED IN THE PLANS.

ABBREVIATIONS

AC	- ASBESTOS CEMENT	DD	- DEFLECT DOWN	FO	- FIBER OPTIC CABLE	PRC	- POINT OF REVERSE CURVATURE	SAS	- SANITARY SEWER
ARV	- AIR/VACUUM RELEASE VALVE	DIP	- DUCTILE IRON PIPE	G	- GAS	PRV	- PRESSURE RELIEF VALVE	SD	- STORM DRAIN
B	- BASELINE	DU	- DEFLECT UP	HP	- HIGH PRESSURE	PT	- POINT OF TANGENCY	TC	- TOP OF CURB
BCT	- BEGIN CROWN TRANSITION	E	- EXISTING	I	- INSTALL	PUE	- PUBLIC UTILITY EASEMENT	T	- TELEPHONE
C	- CONSTRUCT	ECT	- END CROWN TRANSITION	LP	- LIGHT POLE	R/REL	- REMOVE & RELOCATE	TL	- TRAFFIC LIGHT
CAV	- COMBINATION AIR VALVE	ELEV	- ELEVATION	MH	- MANHOLE	R/RPLC	- REMOVE & REPLACE	TP	- TOP OF PIPE
CCP	- CONCRETE CYLINDER PIPE	F-F	- FACE TO FACE	NMUI	- NEW MEXICO UTILITIES, INC.	PVC	- POLY VINYL CHLORIDE	UE	- UNDERGROUND ELECTRIC
CI	- CAST IRON	F/F	- FEET/FOOT	PC	- POINT OF CURVATURE	R	- REMOVE	VCP	- VITRIFIED CLAY PIPE
CL	- CENTERLINE	FH	- FIRE HYDRANT	PCC	- POINT OF COMPOUND CURVATURE	REL	- RELOCATE	VER	- VERIFY LOCATION
COA	- CITY OF ALBUQUERQUE	FL	- FLOW LINE	POC	- POINT ON CURVE	ROW	- RIGHT-OF-WAY	W OR WL	- WATERLINE
				PP	- POWER POLE			X	- CROSSING

VICINITY MAP



MAP NO K-10-Z

GRAPHIC SCALE
1000 0 500 1000 2000

SHEET INDEX

Unser Diversion LOMR
Albuquerque, New Mexico
Supporting Document #3

1 OF 5	COVER
2 OF 5	STORM DRAIN PLAN & PROFILE
3 OF 5	TRAFFIC CONTROL PLAN
4 OF 5	TRAFFIC CONTROL SIGNING EXAMPLES
5 OF 5	CONSTUCTION TRAFFIC CONTROL

UTILITY COMPANY CONTACTS

PNM
Tom Kratliger
Alvarado square
Mail Stop 0208
Albuquerque, New Mexico 87158
(505) 848-4947

GAS CO.
Tim Cynova
4625 Edith Blvd, NE
Albuquerque, New Mexico 87107
(505) 761-7775

US WEST COMMUNICATIONS
Becky Olesen
201 Third Street
P.O. Box 1355, Sta. 952
Albuquerque, New Mexico 87103
(505) 245-6694

AT&T
Ishmael Pantoja
111 Third ST., NW
Albuquerque, New Mexico 87103
(505) 842-2806

JONES INTERCABLE
Karen Shore
4611 Monitbel Pl., NE
P.O. Box 27138
Albuquerque, NM 87125-7138
(505) 761-6220

REV.	SHEETS	CITY ENGINEER	DATE	USER DEPARTMENT	DATE	USER DEPARTMENT	DATE

APPROVAL OF REVISIONS

11-18-92

EASTERLING & ASSOCIATES, INC.
CONSULTING ENGINEERS
10131 COORS RD, NW, SUITE H - 7 & 8
ALBUQUERQUE, NEW MEXICO 87114
(505) 898-8021 FAX (505) 898-8501

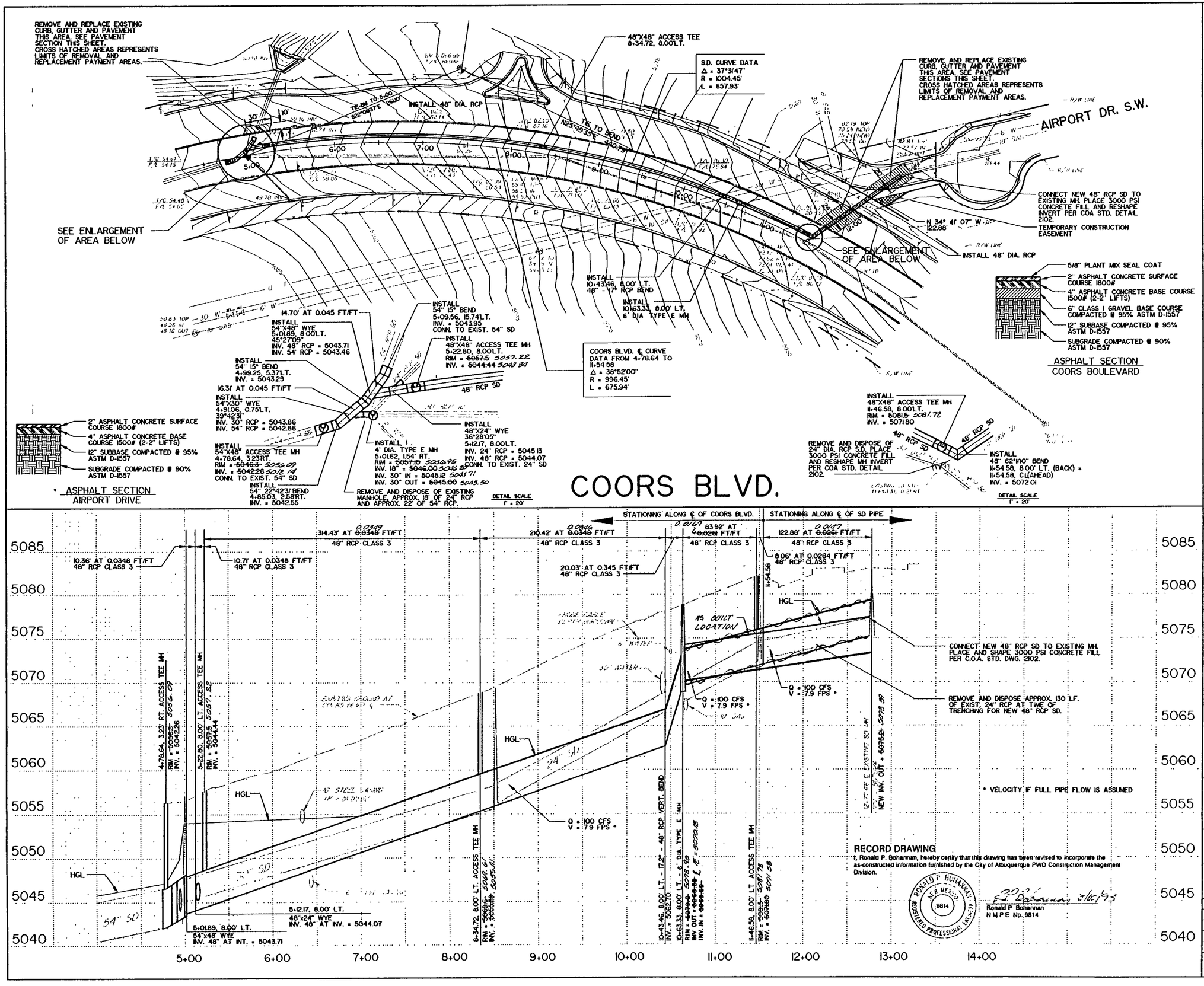
PROJECT NUMBER 4383.91

APPROVED FOR CONSTRUCTION

CITY ENGINEER 1-22-94 DATE

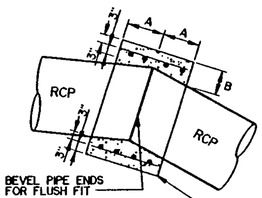
SHEET 1 OF 5

081093



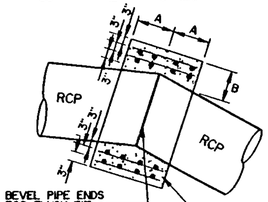
NOTES:

1. TRENCHES FOR THE STORM DRAIN SHALL NOT EXTEND OUTSIDE OF THE STREET RIGHT OF WAY.
2. PAYMENT FOR PAVING AND CURB AND GUTTER REMOVAL AND REPLACEMENT SHALL BE LIMITED TO THE REMOVAL AND REPLACEMENT PAYMENT AREAS SHOWN ON THE PLAN OR TO QUANITTES MEASURED IN THE FIELD WHICH EVER IS LESS.
3. WHERE CONVENTIONAL JOINTS ARE NOT POSSIBLE TO CONNECT NEW STORM PIPES TO EXISTING PIPES THE CONTRACTOR SHALL JOIN PIPES WITH A CONCRETE COLLAR AS DETAILED BELOW. CONCRETE COLLARS SHALL BE CONSIDERED INCIDENTAL TO THE PIPE - NO ADDITIONAL PAYMENT WILL BE MADE FOR THIS ITEM.
4. REINFORCED CONCRETE PIPE WYE CONNECTIONS AND BENDS SHALL BE FACTORY FABRICATED.
5. THE MINIMUM CLASS OF BEDDING FOR THE STORM DRAIN BETWEEN STATIONS 8+50 AND 10+50 SHALL BE CLASS "B". THE MINIMUM CLASS OF BEDDING IN ALL OTHER AREAS SHALL BE CLASS "C".



3000 PSI CONCRETE REINFORCED WITH #4 REBAR HOOPS 6" O.C. AND TRANSVERSE #4 REBAR 12" O.C.

RCP DIA.	A	B
18"	12"	6" MIN.
24"	12"	6" MIN.
30"	12"	6" MIN.

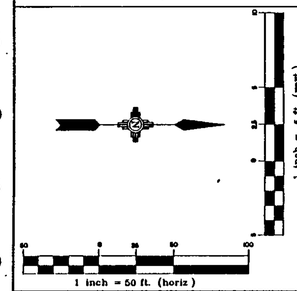


3000 PSI CONCRETE REINFORCED WITH 2 CAGES CONSISTING OF #4 REBAR HOOPS 6" O.C. AND TRANSVERSE #4 REBAR 12" O.C.

RCP DIA.	A	B
48"	18"	12" MIN.
54"	18"	12" MIN.

CONCRETE COLLARS

NOTE: CONCRETE COLLARS ARE TO BE USED ONLY WHERE CONVENTIONAL JOINTS ARE NOT POSSIBLE, SEE NOTE 3 ABOVE.



EASTERLING & ASSOCIATES, INC.
CONSULTING ENGINEERS
10131 Coors Rd., NW, Suite H - 7 & 8
ALBUQUERQUE, NEW MEXICO 87114
(505) 898-8021 FAX (505) 898-8501

AS BUILT INFORMATION
CONTRACTOR SUNPAVE MECHANICAL
WORK STAKED BY C O A DATE
INSPECTORS DIMENSIONS CHANGE BY DATE
FIELD VERIFICATION BY C O A DATE
DRAWINGS CORRECTED BY EAI DATE 8-93
MICRO-FILM INFORMATION
RECORDED BY DATE
NO.

BENCH MARKS
STATION NAME: 2K - 10 ELEVATION: 5167.690
"X" CHISLED ON THE WSW CURB RETURN.
AT THE INTERSECTION OF GWIN AND 68th ST., SW

SURVEY INFORMATION
FIELD NOTES

NO.	BY	DATE
TOPO	GEO-SERVICE	8/23/92

ENGINEERS SEAL

NO.	DATE	REMARKS	BY
		REVISIONS	
		DESIGN	

DESIGNED BY V.S.F. DATE OCT. 1992
DRAWN BY D.E.C. DATE OCT. 1992
CHECKED BY C.M.E. DATE OCT. 1992

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING GROUP

TITLE: AIRPORT DRIVE STORM DRAIN OUTFALL
COORS BLVD.
STORM DRAIN PLAN & PROFILE

APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
D.R.C Chair		1-4-93	WATER	N/A RWE	11-30-92
TRANS DEV		12-03-92	WASTE WATER	N/A RWE	11-30-92
HYDROLOGY		12-11-92			

PROJECT NO. 4383.91 MAP NO. K-10 SHEET 2 OF 5

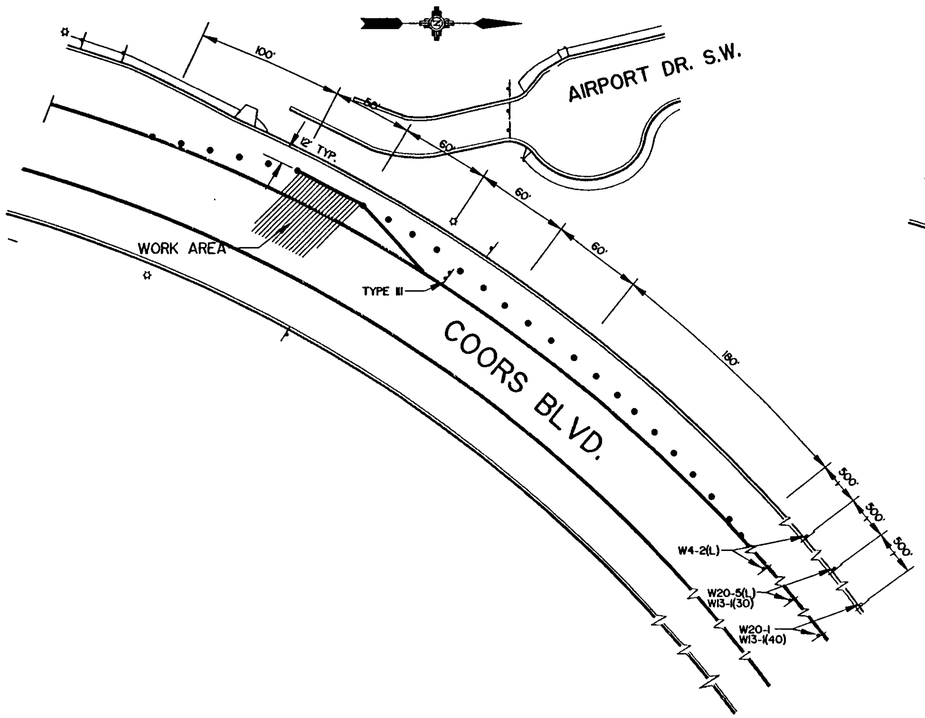
RECORD DRAWING

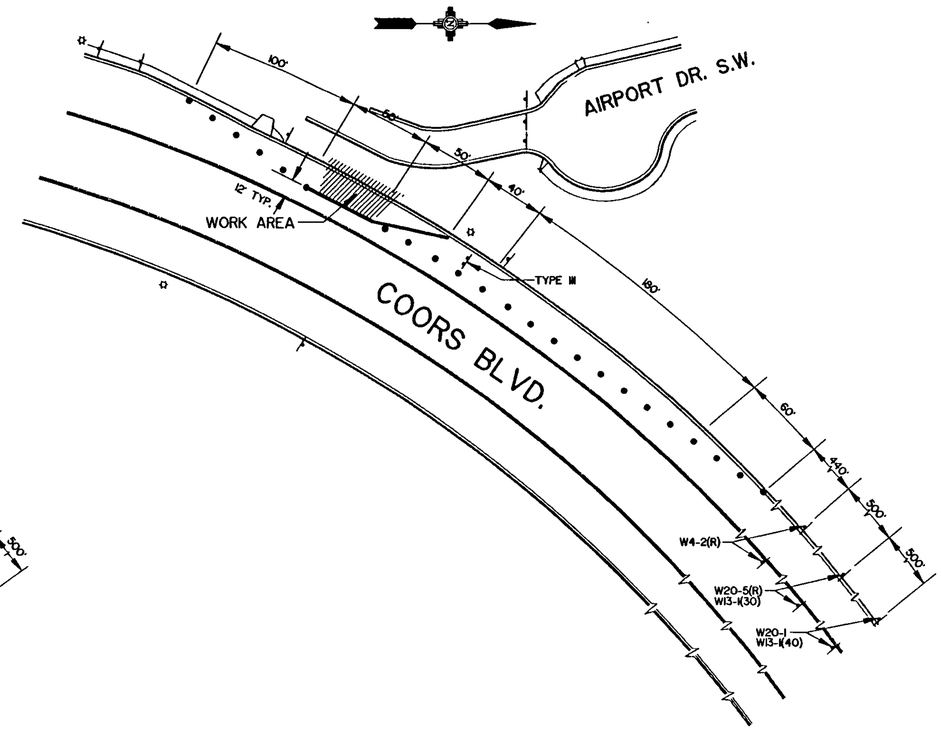
I, Ronald P. Bohannan, hereby certify that this drawing has been revised to incorporate the as-constructed information furnished by the City of Albuquerque PWD Construction Management Division.

RONALD P. BOHANNAN NEW MEXICO 9814 REGISTERED PROFESSIONAL ENGINEER

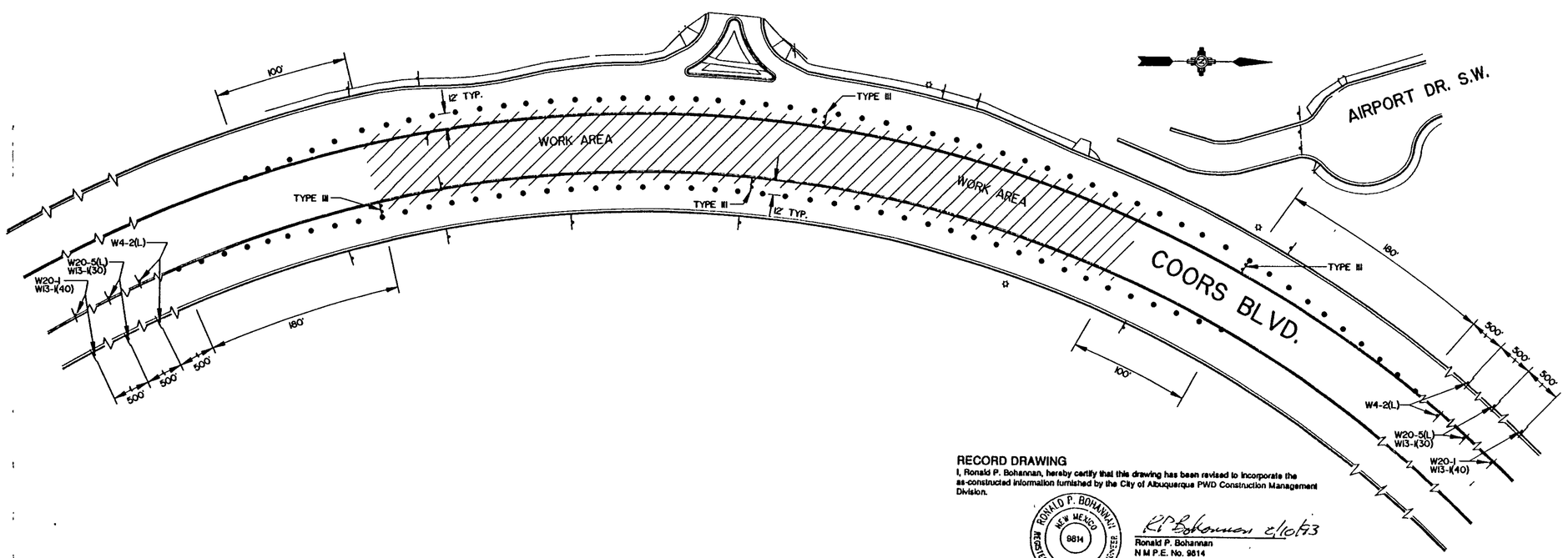
Ronald P Bohannan 2/16/93
Ronald P Bohannan
N.M.P.E. No. 9814

081093





CONSTRUCTION ZONE SPEED LIMIT = 30 MPH



GENERAL NOTES

1. IMPLEMENT TRAFFIC CONTROL DURING CONSTRUCTION PHASE IN ACCORDANCE WITH TYPICAL TRAFFIC CONTROL STRATEGIES AND AS SHOWN HEREIN.
2. CONTRACTOR SHALL BACKFILL ALL OPEN TRENCHES AT THE END OF THE WORK DAY IN AREAS WHERE TRAFFIC IS ALLOWED TO TRAVEL THROUGH THE CONSTRUCTION ZONE.
3. CONTRACTOR SHALL PROVIDE CONCRETE JERSEY BARRIERS AT LOCATIONS WHERE TRENCHES WILL BE LEFT OPEN WITHIN 25 FEET OF EDGE OF TRAVELED WAY.
4. CONTRACTOR SHALL INSTALL REMOVABLE PAVEMENT MARKING TAPE FOR CONSTRUCTION ZONES AT LOCATIONS REQUIRING TRAFFIC TO BE SHIFTED OUT OF NORMAL TRAVEL LANES FOR TIME PERIODS EXCEEDING SEVEN CALENDAR DAYS. REMOVABLE PAVEMENT MARKING TAPE SHALL BE 20 MIL THICK WITHOUT FOIL BACKING.
5. ALL WARNING SIGNS SHALL BE 48" X 48" MINIMUM SIZE.

LEGEND

- CONCRETE JERSEY BARRIERS
- CURB AND GUTTER
- SIGN
- STREET LIGHT
- BARREL
- TYPE III BARRICADE

1 inch = 50 ft. (horiz.)

EASTERLING & ASSOCIATES, INC.
CONSULTING ENGINEERS
10131 Coors Rd., NW, Suite H-7/8
ALBUQUERQUE, NEW MEXICO 87114
(505) 898-8021 FAX (505) 898-8501

RECORD DRAWING

I, Ronald P. Bohannan, hereby certify that this drawing has been revised to incorporate the as-constructed information furnished by the City of Albuquerque PWD Construction Management Division.

RONALD P. BOHANNAN NEW MEXICO 9814 REGISTERED PROFESSIONAL ENGINEER

R P Bohannan 2/10/93

Ronald P. Bohannan
N.M.P.E. No. 9814

NO.	DATE	REMARKS	BY
		REVISIONS	

		DATE
DESIGNED BY	V.S.F.	OCT. 1992
DRAWN BY	D.E.C.	OCT. 1992
CHECKED BY	C.M.E.	OCT. 1992

ENGINEERS SEAL — REGISTERED PROFESSIONAL ENGINEER 6311 — 11-18-92

AS BUILT INFORMATION
CONTRACTOR SANDRUCK MECHANICAL
WORK STAKED BY C.O.A. DATE
INSPECTORS PUNCH LIST BY DATE
FIELD VERIFICATION BY C.O.A. DATE
DRAWINGS CORRECTED BY E.A.I. DATE 8/93
MICRO-FILM INFORMATION
RECORDED BY DATE
NO.

BENCH MARKS
STATION NAME: 2K - 10 ELEVATION: 5967.690
"X" CHISLED ON THE WSW CURB RETURN, AT THE INTERSECTION OF GWIN AND 68th ST., SW

SURVEY INFORMATION
FIELD NOTES

NO.	BY	DATE

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING GROUP

TITLE: AIRPORT DRIVE STORM DRAIN OUTFALL
COORS BLVD.
TRAFFIC CONTROL PLAN

APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
D.R.C. Chair		1-4-93	WATER	N/A	11-30-92
TRANS. DEV.		12-21-92	WASTE WATER	N/A	11-30-92
HYDROLOGY		12-14-92	TRAF. OPER.		
			CONST. COORD.		12/11/92

PROJECT NO.	MAP NO.	SHEET	OF
4383.91	K-10	3	5

081093

CONSTRUCTION TRAFFIC CONTROL GENERAL NOTES

1. CONTRACTOR MUST OBTAIN FROM CONSTRUCTION COORDINATION AN EXCAVATION/BARRICADING PERMIT BEFORE ENGAGING IN ANY CONSTRUCTION, MAINTENANCE OR REPAIR WORK IN ANY OF THE CITY OF ALBUQUERQUE'S RIGHTS-OF-WAY. EMERGENCY WORK THAT WOULD PRESERVE LIFE OR PROPERTY IS EXCLUDED WITH THE UNDERSTANDING, THAT A PERMIT SHALL BE OBTAINED WITHIN 24 TO 48 HOURS.

2. CONTRACTOR SHALL AT THE TIME OF PERMIT REQUEST, SUBMIT FOR APPROVAL BY CONSTRUCTION COORDINATION, A TRAFFIC CONTROL PLAN DETAILING ALL EXISTING TOPOGRAPHY SUCH AS LANE WIDTHS, DRIVEWAYS, AND BUSINESS/RESIDENTIAL ACCESSES. THE TRAFFIC CONTROL PLAN SHALL INCLUDE ALL PHASES OF WORK AND SCHEDULES INVOLVED IN THE CONSTRUCTION PROJECT. ANY SEPARATE PHASES OF A CONSTRUCTION PROJECT SHALL BE GIVEN AN INDIVIDUAL PERMIT EACH BLANKET PERMITS WILL NOT BE ISSUED.

3. THESE TYPICAL TRAFFIC CONTROL PLANS DO NOT REFLECT THE EXISTING TOPOGRAPHY SUCH AS DRIVEWAYS, LANE WIDTHS, AND BUSINESS/RESIDENTIAL ACCESSES. EVERY LOCATION THAT REQUIRES CONSTRUCTION TRAFFIC CONTROL SHALL HAVE A DETAILED TRAFFIC CONTROL PLAN SHOWING ALL EXISTING TOPOGRAPHY

4. CONSTRUCTION SHALL NOT BEGIN UNLESS A TRAFFIC CONTROL PLAN HAS BEEN APPROVED AND VERIFIED BY CONSTRUCTION COORDINATION

5. CONSTRUCTION COORDINATION SHALL BE NOTIFIED 48 HOURS PRIOR TO ANY TRAFFIC CONTROL CHANGES NEEDED BY CONTRACTOR, THAT WERE NOT PREVIOUSLY APPROVED. THESE TRAFFIC CONTROL CHANGES SHALL BE REQUESTED IN WRITING ACCOMPANIED WITH A TRAFFIC CONTROL PLAN REFLECTING SUCH CHANGES.

6. ALL CONSTRUCTION TRAFFIC CONTROL DEVICES SHALL COMPLY TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), LATEST EDITION. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO INSTALL, SERVICE AND MAINTAIN ALL TRAFFIC CONTROL DEVICES. TRAFFIC CONTROL DEVICES SHALL NOT BE REMOVED OR ALTERED IN ANY WAY WITHOUT THE APPROVAL OF CONSTRUCTION COORDINATION, PER SECTION 6A-4 OF THE MUTCD, LATEST EDITION.

7. THE CONSTRUCTION TRAFFIC CONTROL INITIAL SET-UP SHALL BE BY AN AMERICAN TRAFFIC SAFETY SERVICES ASSOCIATION (ATSSA) CERTIFIED WORKSITE TRAFFIC SUPERVISOR. THE MAINTENANCE AND SERVICING SHALL ALSO BE DONE BY AN ATSSA CERTIFIED WORKSITE TRAFFIC SUPERVISOR OR EQUIVALENT.

8. CONTRACTOR IS RESPONSIBLE TO MAINTAIN AND SERVICE ALL TRAFFIC CONTROL DEVICES 24 HOURS A DAY, 7 DAYS A WEEK THROUGHOUT LENGTH OF PROJECT. CONTRACTOR IS RESPONSIBLE THAT ALL TRAFFIC CONTROL DEVICES COMPLY WITH THE MUTCD, LATEST EDITION

9. ALL ADVANCE WARNING SIGNS SHALL BE DOUBLE INDICATED WHENEVER THERE ARE MULTI-LANE TRAFFIC IN ANY ONE GIVEN DIRECTION AND THERE IS SUFFICIENT MEDIAN SPACE.

10. ALL BARRICADES IN ALL TAPERS AND TANGENTS SHALL BE PLACED APART, A DISTANCE MEASURED IN FEET, EQUAL TO THAT OF THE POSTED SPEED LIMIT. NO EXCEPTIONS UNLESS APPROVED BY CONSTRUCTION COORDINATION PER MUTCD SECTION 6A-4.

11. CONTRACTOR SHALL NOT BEGIN WORK BEFORE 8:30 A.M. OR END WORK AFTER 4:00 P.M. WITHOUT THE APPROVAL OF CONSTRUCTION COORDINATION

12. CONTRACTOR IS RESPONSIBLE TO PROVIDE CONSTRUCTION COORDINATION, A WEEKLY LOG OF DAILY INSPECTIONS OF BARRICADE AND MAINTENANCE SCHEDULES ON PROJECTS THAT ARE OVER ONE WEEK DURATION

13. EQUIPMENT OR MATERIALS SHALL NOT BE STORED WITHIN 15 FEET OF A TRAVELLED TRAFFIC LANE DURING NON-WORKING HOURS WITHOUT THE APPROVAL OF CONSTRUCTION COORDINATION.

14. CONTRACTOR SHALL PROVIDE AND MAINTAIN A SAFE AND ADEQUATE MEANS OF CHANNELIZING PEDESTRIAN TRAFFIC AROUND AND THROUGH THE CONSTRUCTION AREA.

15. CONTRACTOR IS RESPONSIBLE FOR OBLITERATION OF ANY CONFLICTING STRIPING AND RESPONSIBLE FOR ALL TEMPORARY STRIPING

16. CONTRACTOR SHALL MAINTAIN ACCESS TO ALL FACILITIES, BUSINESSES AND/OR RESIDENTS AT ALL TIMES.

17. CONTRACTOR SHALL PROVIDE ACCESS SIGNS FOR BUSINESSES LOCATED WITHIN THE CONSTRUCTION AREA UNDER THE SUPERVISION OF CONSTRUCTION COORDINATION. EACH ACCESS SIGN SHALL HAVE 5 INCH, WHITE OPAQUE LETTERING ON BLUE REFLECTORIZED BACKGROUND. ACCESS SIGNS SHALL BE CONSIDERED INCIDENTAL TO THE BID AND NOT PART OF THE CONTRACT UNLESS OTHERWISE STATED. NO MORE THAN 3 BUSINESSES SHALL BE LISTED ON A ACCESS SIGN. SHOPPING CENTERS AND MALLS SHALL BE LISTED AS SUCH

18. ALL ADVANCE WARNING SIGNS SHALL MEET THE MINIMUM REFLECTIVE INTENSITY REQUIREMENTS SET FORTH BY THE CITY OF ALBUQUERQUE CONSTRUCTION COORDINATION SHALL DETERMINE ALL REQUIREMENTS AND APPROVE OR DISAPPROVE ANY ADVANCE WARNING SIGN PER SECTION 6A-4 OF THE MUTCD, LATEST EDITION.

19. 24 HOURS PRIOR TO OCCUPYING OR CLOSING OF A RIGHT-OF-WAY, CONTRACTOR SHALL NOTIFY: POLICE, FIRE DEPARTMENT, SCHOOLS, HOSPITALS, TRANSIT AUTHORITY, BUSINESSES AND/OR RESIDENTS THAT WILL BE AFFECTED BY THE CONSTRUCTION.

20. ANY FIELD ADJUSTMENTS SHALL BE APPROVED BY CONSTRUCTION COORDINATION.

21. EXCAVATIONS SHALL BE PLATED, TEMPORARILY PATCHED OR RESURFACED PRIOR TO OPENING OF TRAFFIC. A MINIMUM OF 11 FEET SHALL BE PROVIDED FOR TRAFFIC IN ANY GIVEN DIRECTION. CONTRACTOR IS RESPONSIBLE FOR ANY WORK INVOLVED IN SATISFYING THESE REQUIREMENTS

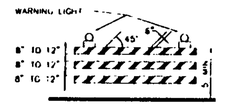
22. CONTRACTOR SHALL AT ALL TIMES COMPLY WITH THE FOLLOWING:
    1. STANDARDS AND REQUIREMENTS SET FORTH IN THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION
    2. THE CITY OF ALBUQUERQUE TRAFFIC CODE, LATEST EDITION.
    3. SECTION 19 OF THE CITY OF ALBUQUERQUE'S STANDARD SPECIFICATIONS FOR PUBLIC WORK CONSTRUCTION, AS WELL AS OTHER SECTIONS.

23. FAILURE TO COMPLY WITH ANY OF THE ABOVE MENTIONED, WILL BE ADEQUATE CAUSE TO CEASE ALL WORK ON ANY CONSTRUCTION PROJECT. WORK WILL NOT RESUME UNTIL ALL REQUIREMENTS ARE ADDRESSED AND APPROVED BY CONSTRUCTION COORDINATION

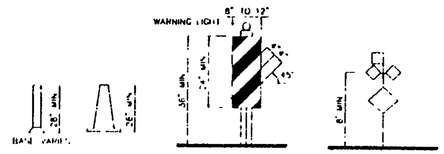
24. ALL TRAFFIC CONTROL DEVICES SHALL BE KEPT IN NEW-CLEAN CONDITION. WASHING OF EQUIPMENT IS INCIDENTAL TO IT'S PLACEMENT AND MAINTENANCE

25. TRAFFIC CONTROL STANDARDS APPLY ONLY WHERE THE CONSTRUCTION TRAFFIC CONTROL PLANS ARE NOT SPECIFIC

PROJECT CONSTRUCTION TRAFFIC CONTROL GENERAL NOTES



TYPE III BARRICADE

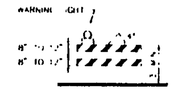


CONES — VERTICAL PANEL — HIGH LEVEL WARNING DEVICE

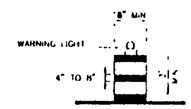
LEGEND

- WORK AREA
- BARRICADE - TYPE I, TYPE II, OR BARREL
- BARRICADE - TYPE III
- x VERTICAL PANEL
- WARNING SIGN
- D DISTANCE BETWEEN SIGNS - A DISTANCE MEASURED IN FEET EQUAL TO A VALUE OF TEN TIMES THE SPEED LIMIT OF THE STREET
- FLAGMAN POSITION
- S SPACING BETWEEN BARRICADES- A DISTANCE MEASURED IN FEET EQUAL TO THE SPEED LIMIT OF THE STREET
- L TAPER LENGTH - SEE CHART BELOW

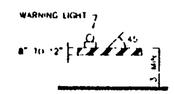
THE TANGENT LENGTH IS EQUAL TO THE TAPER LENGTH FOR A GIVEN STREET



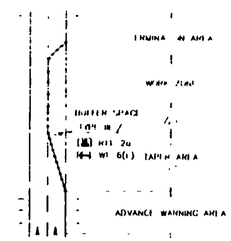
TYPE II BARRICADE
COLLAPSIBLE



BARREL



TYPE I BARRICADE
COLLAPSIBLE



TRAFFIC CONTROL ELEMENTS

TAPER REQUIREMENTS

SPEED LIMIT (MPH)	TAPER LENGTH (FEET) 10' LANE	11' LANE	12' LANE	MINIMUM NUMBER OF DEVICES FOR TAPER	MAXIMUM DEVICE SPACING IN FEET ALONG TAPER	AFTER TAPER
20	70	75	80	5	20	20
25	105	115	125	6	25	25
30	150	165	180	7	30	30
35	205	225	245	8	35	35
40	270	295	320	9	40	40
45	450	495	540	13	45	45
50	500	550	600	11	50	50
55	550	605	660	13	55	55

RECOMMENDED SIGN SPACING FOR ADVANCE WARNING SIGN SERIES

SPEED MILES PER HOUR	MINIMUM DISTANCE IN FEET BETWEEN SIGNS	FROM LAST SIGN TO TAPER
0-20	10 X SPEED LIMIT	10 X SPEED LIMIT
25-30	10 X SPEED LIMIT	10 X SPEED LIMIT
30-35	10 X SPEED LIMIT	10 X SPEED LIMIT
40-45	10 X SPEED LIMIT	10 X SPEED LIMIT
50-60	10 X SPEED LIMIT	10 X SPEED LIMIT

TAPER CRITERIA

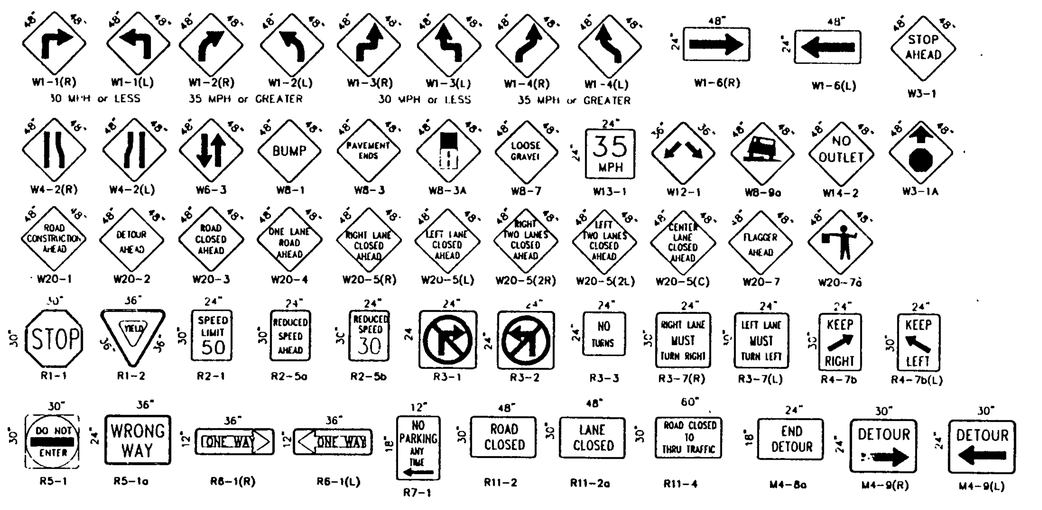
TYPE OF TAPER	TAPER LENGTH
UPSTREAM TAPER:	
MERGING TAPER	L MINIMUM
SHIFTING TAPER	1/2 L MINIMUM
SHOULDER TAPER	1/3 L MINIMUM
TWO-WAY TRAFFIC TAPER	100 FEET MAXIMUM
DOWNSTREAM TAPERS	100 FEET PER LANE

TAPER LENGTH COMPUTATION

SPEED LIMIT	
40 MPH OR LESS	$L = \frac{WS^2}{60}$
45 MPH OR GREATER	$L = W \times S$

L = TAPER LENGTH
W = WIDTH OF OFFSET IN FEET
S = POSTED SPEED OR OFF-PEAK 85-PERCENTILE SPEED IN MPH

SIGN FACE DETAILS



ALL CONSTRUCTION WARNING SIGNS SHALL HAVE A BLACK LEGEND ON A ORANGE BACKGROUND.

ALL ADVANCE WARNING SIGNS SHALL BE A MINIMUM OF FORTY EIGHT (48) INCHES BY FORTY EIGHT (48) INCHES IN SIZE AND SHALL HAVE ONE WARNING LIGHT.

AS BUILT INFORMATION — CONTRACTOR — DATE; WORK STAKED BY — DATE; INSPECTOR'S ACCEPTANCE BY — DATE; ACCEPTED FOR IRRIGATION BY — DATE; DRAWINGS CORRECTED BY — DATE; MICRO-FILM INFORMATION — RECORDED BY — DATE; NO.

BENCH MARKS

SURVEY INFORMATION — FIELD NOTES — NO. — BY — DATE

ENGINEER'S SEAL

NO.	DATE	REMARKS	BY
		REVISIONS	

DESIGN
DESIGNED BY RICARDO ROYBAL, P.E. DATE AUG. 1992
DRAWN BY CADD.- A.F.V. DATE AUG. 1992
CHECKED BY DATE

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING GROUP

TITLE: AIRPORT DRIVE STORM DRAIN OUTFALL
COORS BLVD.
SIGNING AND CONSTRUCTION TRAFFIC CONTROL STANDARDS

APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
DRC CHAIRMAN	[signature]	1-4-93	WATER	N/A RWK	11-30-92
TRANSPORTATION	N/A [signature]	12-22-92	WASTE WATER	N/A RWK	11-30-92
HYDROLOGY	[signature]	12-14-92			

R Roybal 12/1/92

PROJECT NO.	MAP NO.	SHEET	OF
4383.91	K-10	4	5

08-11-92
C:\CSTD1.DWG (1=1)

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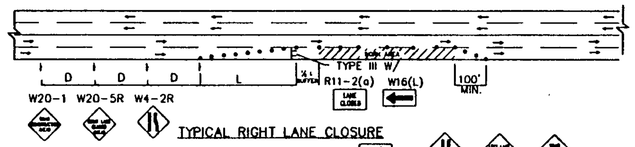
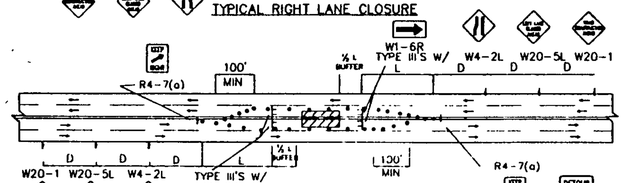
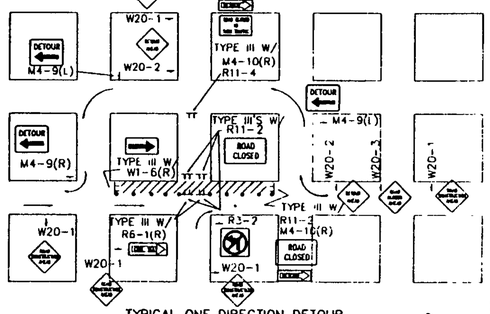


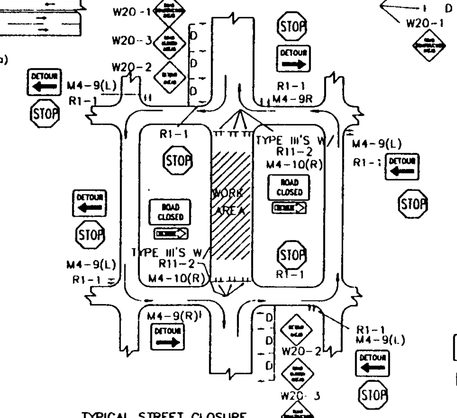
TYPICAL RIGHT LANE CLOSURE



TYPICAL LEFT LANE CLOSURE

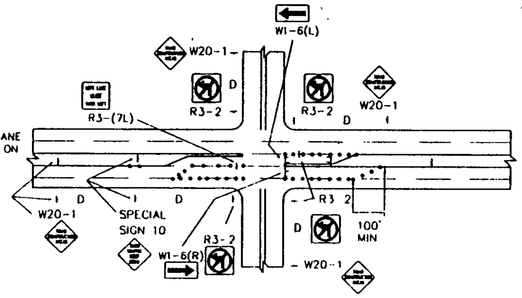


TYPICAL ONE DIRECTION DETOUR



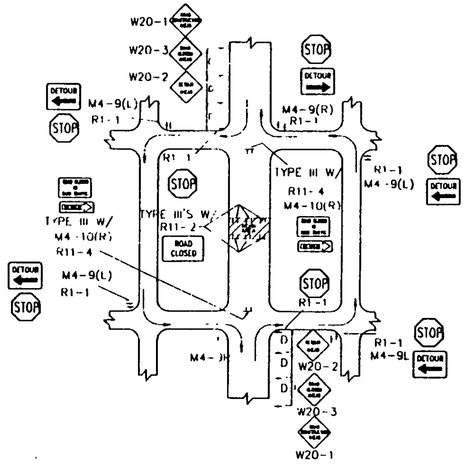
TYPICAL STREET CLOSURE

NOTE: (R1-1) BASED ON FIELD CONDITIONS.



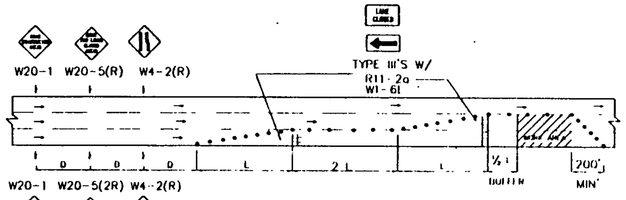
TYPICAL LANE CLOSURE AT INTERSECTION

NOTE: DEPENDING ON WORK ZONE LOCATION

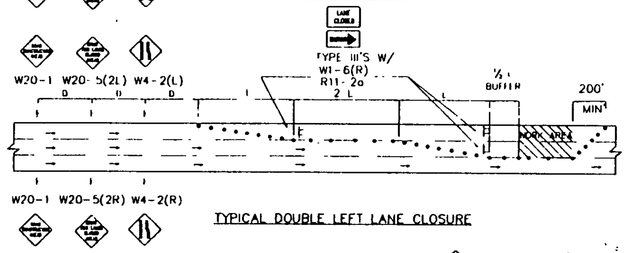


TYPICAL MID-BLOCK CLOSURE

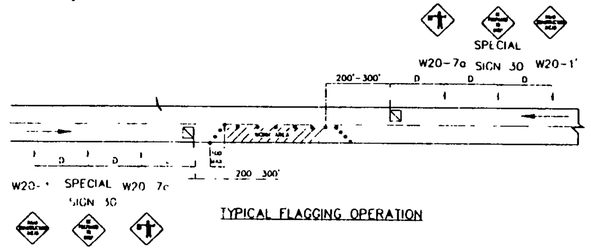
NOTE: (R1-1) BASED ON FIELD CONDITIONS



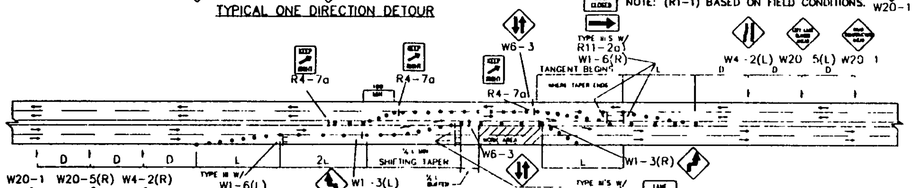
TYPICAL DOUBLE RIGHT LANE CLOSURE



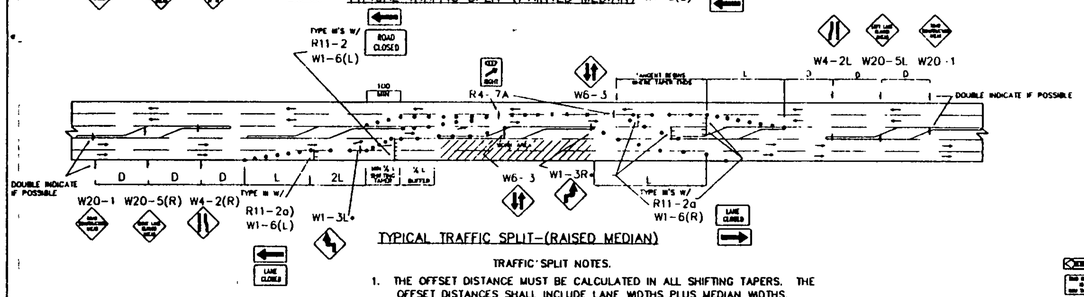
TYPICAL DOUBLE LEFT LANE CLOSURE



TYPICAL FLAGGING OPERATION



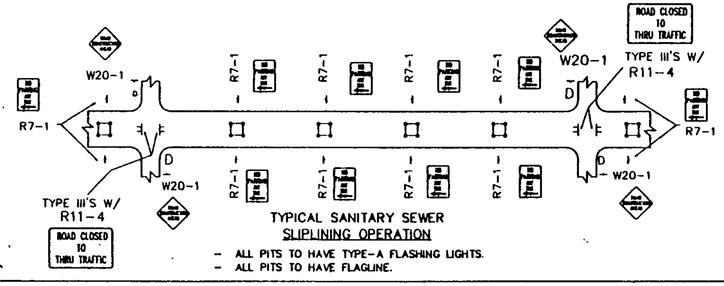
TYPICAL TRAFFIC SPLIT-(PAINTED MEDIAN)



TYPICAL TRAFFIC SPLIT-(RAISED MEDIAN)

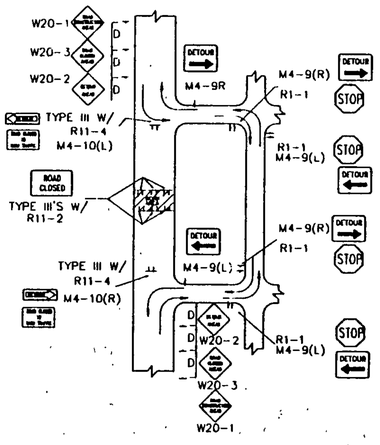
TRAFFIC SPLIT NOTES.

1. THE OFFSET DISTANCE MUST BE CALCULATED IN ALL SHIFTING TAPERS. THE OFFSET DISTANCES SHALL INCLUDE LANE WIDTHS PLUS MEDIAN WIDTHS.
2. ½ L IS MINIMUM DISTANCE FOR SHIFTING TAPERS.
3. REVERSE CURVES MAY BE IMPLEMENTED. ALL CURVE DATA SHALL BE CALCULATED.
4. MEDIAN REMOVAL SHALL BE REQUIRED IF ¼ L OR REVERSE CURVE IS NOT SUFFICIENT. MEDIAN REMOVAL SHALL TAKE PLACE BEFORE SPLITS.
5. REDUCED SPEED MAY BE CONSIDERED.
6. * USE 1-3 FOR 30 MPH OR LESS, W1-4 FOR SPEED 35 MPH OR GREATER



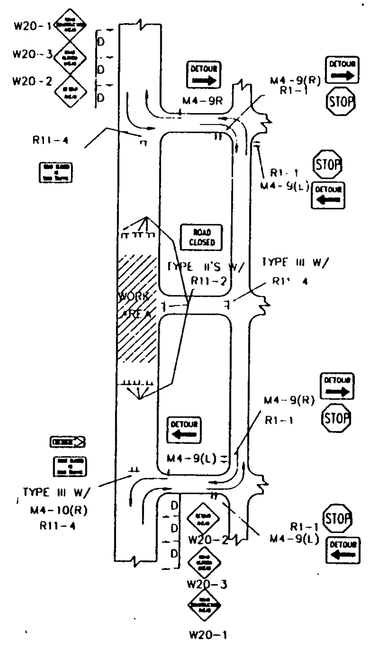
TYPICAL SANITARY SEWER
SLIPLINING OPERATION

- ALL PITS TO HAVE TYPE-A FLASHING LIGHTS.
- ALL PITS TO HAVE FLAGLINE.



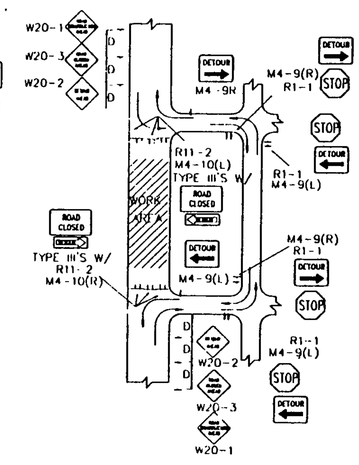
TYPICAL STREET CLOSURE

NOTE: (R1-1) BASED ON FIELD CONDITIONS.



TYPICAL STREET CLOSURE

NOTE: (R1-1) BASED ON FIELD CONDITIONS.



TYPICAL STREET CLOSURE

NOTE: (R1-1) BASED ON FIELD CONDITIONS.

AS BUILT INFORMATION	
CONTRACTOR	DATE
STAKED BY	DATE
INSPECTOR'S CONFORMANCE BY	DATE
FIELD VERIFICATION BY	DATE
DRAWINGS CORRECTED BY	DATE
MICRO-FILM INFORMATION	
RECORDED BY	DATE
NO.	

BENCH MARKS		

SURVEY INFORMATION FIELD NOTES		
NO.	BY	DATE

ENGINEER'S SEAL

NO.	DATE	REMARKS	BY
		REVISIONS	

DESIGN

DESIGNED BY	RICARDO ROYBAL, P.E.	DATE	NOV 1991
DRAWN BY	C.A.D.D./W.L.B./A.F.V.	DATE	NOV. 1991
CHECKED BY		DATE	

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING GROUP

TITLE: AIRPORT DRIVE STORM DRAIN OUTFALL
COORS BLVD.
TYPICAL TRAFFIC CONTROL & SIGNING EXAMPLES (REF. M.U.T.C.D.)

APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
DRC CHAIRMAN		1-4-93	WATER	N/A RWE	11-30-92
TRANSPORTATION		12-02-92	WASTE WATER	N/A RWE	11-30-92
HYDROLOGY		12-14-92			

PROJECT NO.	MAP NO.	SHEET	OF
4383.91	K-10	5	5

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DG-15-92
CTCSTD2.DWG

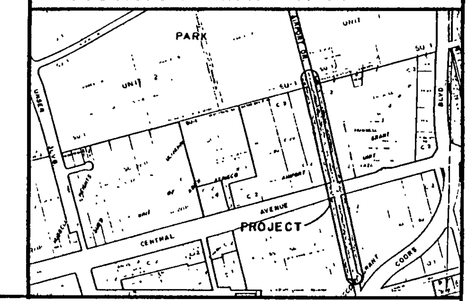
Unser Diversion LOMR
Albuquerque, New Mexico
Supporting Document #3

AIRPORT DRIVE STORM DRAIN

INDEX

SHEET TITLE	SHEET NUMBER
COVER	1
PLAN & PROFILE	2 & 3
STORM DRAIN DETAILS	4 & 5
CONSTRUCTION TRAFFIC CONTROL	5 - 8

VICINITY MAP K-10



GENERAL NOTES

1. All work detailed on these plans to be performed under this contract shall, except as otherwise stated or provided for herein, be constructed in accordance with "City of Albuquerque Standard Specifications Public Works Construction, 1986."

2. Two (2) working days prior to any excavation, Contractor shall contact New Mexico One Call System, 260-1990, for location of existing lines.

3. References made to Standard Drawings refer to City of Albuquerque Standard Detail Drawings, 1986.

4. Stations shown are centerline stations.

5. Prior to construction, the Contractor shall excavate and verify the horizontal and vertical locations of all obstructions. Should a conflict exist, the Contractor shall notify the Engineer or Surveyor so that the conflict can be resolved with a minimum amount of delay.

6. Backfill compaction shall be according to Arterial street use.

7. Three (3) working days in advance of any work on existing public water utilities the Contractor shall contact the Water Systems Division for the execution of the Valve Shut-off Plan. Refer to Section 18 of the Standard Specifications.

8. Three working days prior to beginning construction the Contractor shall submit to the Construction Co-ordination Division a detailed construction schedule. Two (2) working days prior to construction the Contractor shall obtain a barricading permit from the Construction Co-ordination Division. Contractor shall notify Barricade Engineer (768-2551) prior to occupying an intersection. Refer to Section 19 of the Standard Specifications. All street striping altered or destroyed shall be replaced in kind by Contractor to location and in kind as existing or as indicated by this plan set.

9. Contractor will not be allowed to use Class IV or V soils for embedment of flexible pipe. Contractor will not be allowed to deflect joints in flexible pipe. Any deflections required to meet vertical alignment will be achieved between joints.

10. The Contractor shall assume responsibility for any damage to existing paving, curb and gutter or sidewalk during construction, apart from those areas indicated for removal on the plans, and shall repair or replace damaged areas at no cost to the Owner. The Contractor shall suitably protect the curb and gutter from splashing during the tack coat application and shall be responsible for cleaning the splashed areas at no cost to the Owner.

11. When abutting new pavement to existing, the Contractor shall saw cut existing pavement to a straight line, as required, to remove any broken or cracked pavement.

12. Excavations shall be braced and sheeted to provide safety to persons therein. Excavations and related facilities shall comply with all OSHA and other applicable state and local laws and Ordinances.

13. All utility lines shall be maintained in service. Beam and cable, shoring, sheeting or other adequate means shall be used by the Contractor to support utilities in the trench prism. Any damage to existing utilities shall promptly be repaired through the Contractor at no cost to the Owner. The Contractor shall promptly notify the Engineer of any significant deviation of exposed utilities from the locations shown on the plans so that conflicts can be resolved in a timely manner. See General Conditions Section 6.11.2 and Supplemental General Conditions 6.11.2.1 for additional requirements.

Coordination of work with Utility Companies shall be through the following persons:

Gas Company of New Mexico	Tim Cynova	761-7775
Jones Intercable	Karen Shore	761-6220
PNM	Jim Vann	848-3426
US West	Becky Oleson	245-6694

Unser Diversion LOMR
Albuquerque, New Mexico
Supporting Document #4

REV.	SHEETS	CITY ENGR.	DATE	USER DEPT.	DATE	USER DEPT.	DATE

REGISTERED PROFESSIONAL ENGINEER
NEW MEXICO
JEAN J. BORDENAVE
(NEW MEXICO 5110)

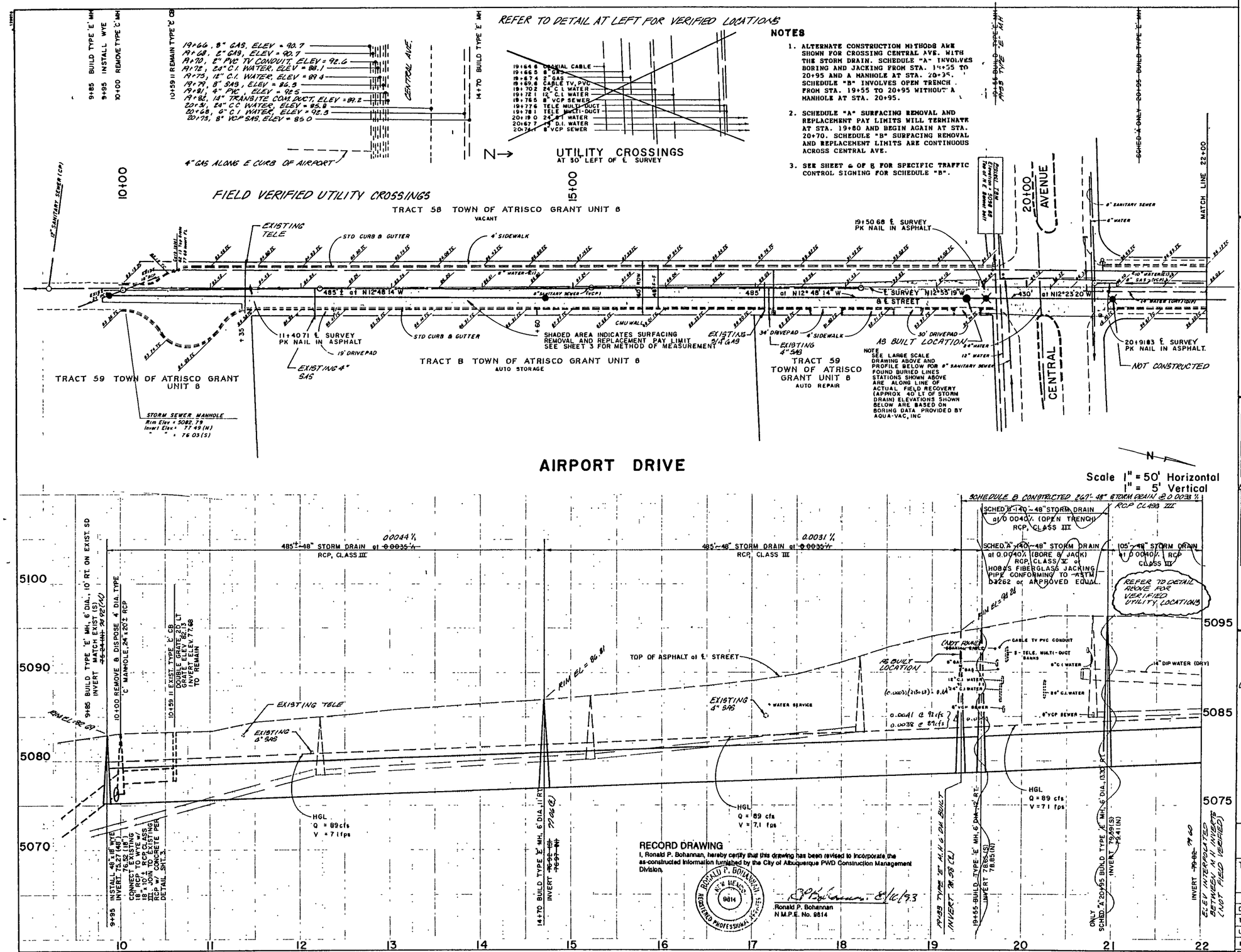
BORDENAVE DESIGNS
PO BOX 91194
ALBUQUERQUE, NM 87199-1194
(505) 823-1344

PROJECT NO. 4383.90

APPROVED FOR CONSTRUCTION
Russell B. Hinton 9-29-92 C.E.

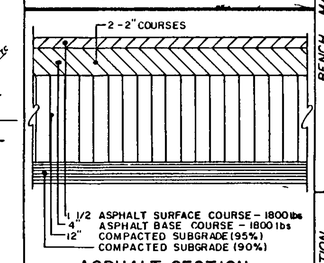
SHEET 1 OF 8

081093

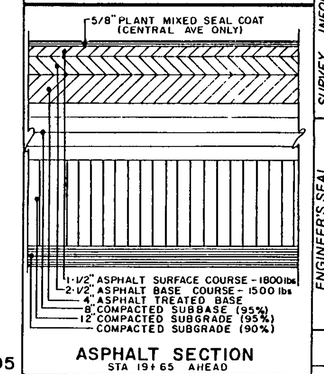


NOTES:

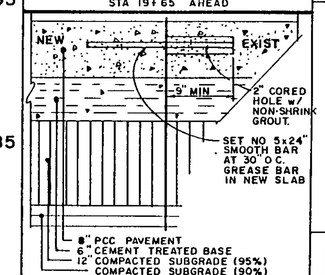
1. All stations shown are centerline of pipe stations.
2. All manholes on this project are 6' in diameter.
3. Invert elevations shown are at edge of manhole. Pipe slopes are measured from edge of manhole to edge of manhole.
4. Sewer pipe pay lengths are from center of manhole to center of manhole. Bearings and distances shown in plan view are from center of manhole to center of manhole.



ASPHALT SECTION
STA 19+65 BACK



ASPHALT SECTION
STA 19+65 AHEAD



CONCRETE SECTION
STA 28+69 TO STA. 29+19

AS BUILT INFORMATION
CONTRACTOR SUNDANCE MECHANICAL
WORK STAKED BY C.O.A. DATE
INSPECTED BY DATE
FIELD VERIFICATION BY C.O.A. DATE
DRAWING CORRECTED BY EAI DATE 8/93
MICRO-FILM INFORMATION
RECORDED BY DATE
NO.

BENCH MARKS
ELEV 5091.891
NM 448-NIA
ACS BRASS CAP IN MONUMENT BOX, LOCATED 7.6' SOUTH & 4.6' WEST OF THE COORS BLVD. MEDIAN NOSE ON THE NORTH SIDE OF THE COORS BLVD./CENTRAL AVE. INTERSECTION.

SURVEY INFORMATION
FIELD NOTES

NO.	BY	DATE
TOPO	HUGG SURV CO., INC	08/05/91

ENGINEER'S SEAL
REGISTERED PROFESSIONAL ENGINEER AND LAND SURVEYOR NO. 5110 STATE OF NEW MEXICO RONALD J. BORDENKAMPER

NO.	DATE	MH STA., GRADE, PIPE SIZE, HYDRAULICS	BY
1	7/92		

REMARKS
REVISIONS

DESIGNED BY JJB DATE 10/91
DRAWN BY MET DATE 11/91
CHECKED BY JJB DATE 11/91

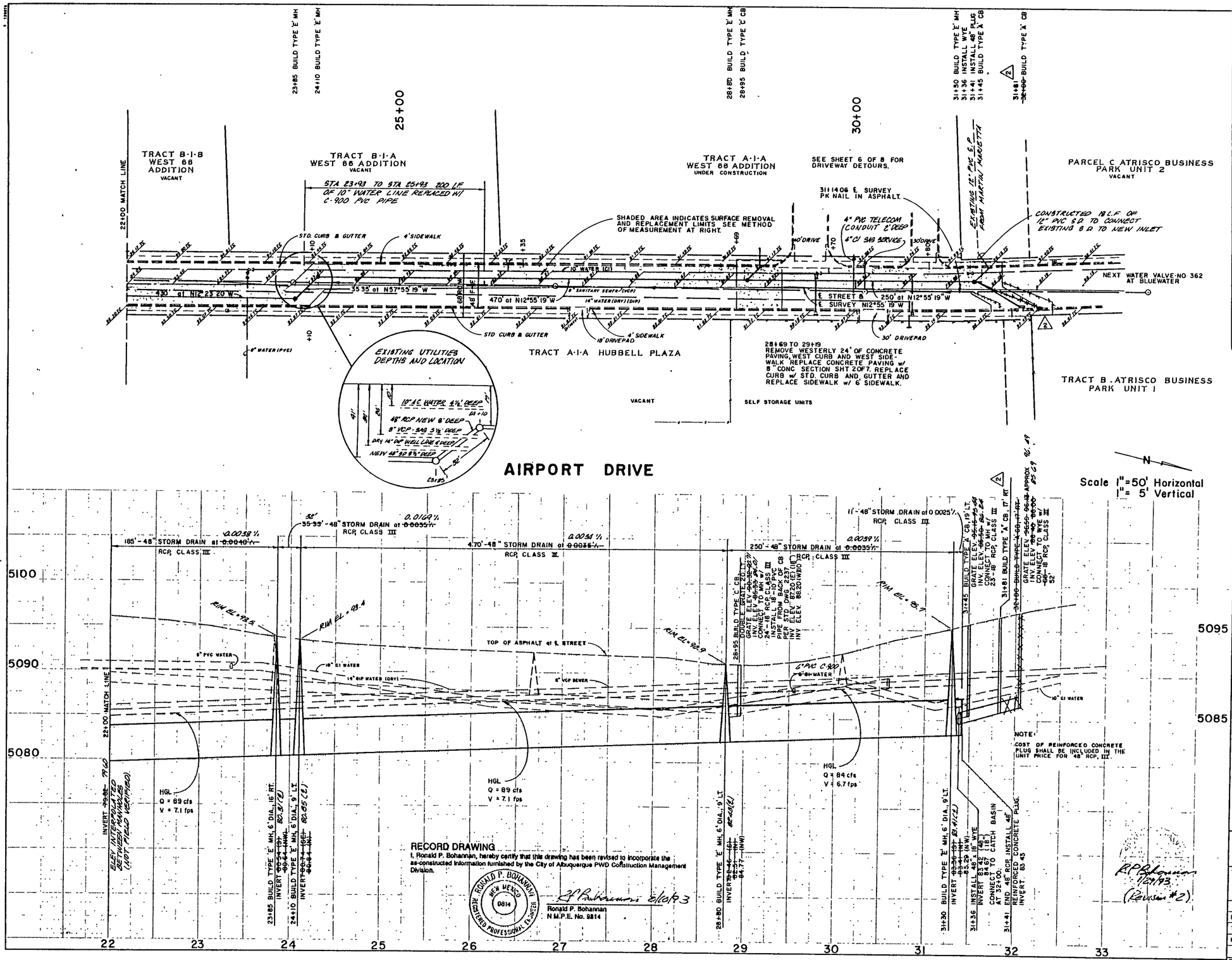
CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING GROUP

TITLE:
AIRPORT DR. STORM DRAIN

APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
DRC Chair		9-21-92			
Trans Dev					
Utility Dev		5-24-92			
Hydrology		1-28-92			

DRAWING NO. 4383.90 | MAP NO K-10 | SHEET 2 OF 8

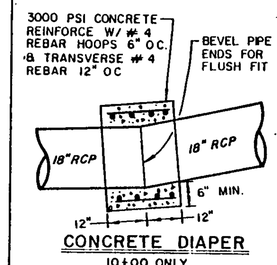
081093



NOTES:

1. WHERE, AFTER TRENCHING, THE REMAINING STRIP OF ASPHALT IS LESS THAN SIX (6) FEET WIDE, THE REMAINING ASPHALT STRIP SHALL BE REMOVED AND REPLACED AND INCLUDED IN THE MEASUREMENT FOR PAYMENT.
2. WHERE, AFTER TRENCHING, THE TOP OF THE TRENCH IS LESS THAN THREE (3) FEET FROM THE FACE OF CURB THE CURB AND SIDEWALK SHALL BE REMOVED AND REPLACED. MEASUREMENT FOR PAYMENT WILL BE CONFINED TO THE STATION LIMITS SHOWN ON THESE PLANS FOR THIS ITEM. IF ADDITIONAL CURB AND SIDEWALK REMOVAL AND REPLACEMENT DUE TO CONDITIONS PER THIS NOTE SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AT NO COST TO THE OWNER.
3. TRENCHES FOR THE STORM DRAIN SHALL NOT BE ALLOWED TO EXTEND OUTSIDE THE STREET RIGHT-OF-WAY.
4. ASPHALT REMOVAL AND REPLACEMENT PAY LIMITS SHALL BE LIMITED TO THE LIMITS SHOWN ON THE PLANS OR THOSE MEASURED IN THE FIELD, WHICHEVER IS LEAST. MODIFY TABLE 701.17.8.2 PER NOTE 1.
5. STATION LIMITS OF CURB AND SIDEWALK SHALL BE EXPANDED TO THE NEXT CONSTRUCTION JOINT AND MEASUREMENT ADJUSTED ACCORDINGLY.

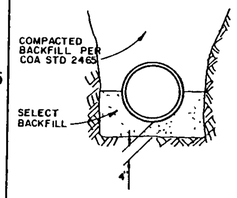
METHOD OF MEASUREMENT



CONCRETE DIAPER
10+00 ONLY

NOTE: COST OF CONCRETE DIAPER SHALL BE INCLUDED IN THE UNIT PRICE FOR 18" RCP, III.

1. SELECT BACKFILL SHALL MEET THE REQUIREMENTS OF PLANT MIX SEAL COAT AGGREGATE IN SEC 329 OF THE STD SPECIFICATIONS
2. SELECT BACKFILL COST SHALL BE INCLUDED IN THE UNIT COST OF TRENCH & BACKFILL



PIPE BEDDING

AS BUILT INFORMATION
CONTRACTOR SANDBUCK MECHANICAL
WORK STAKED BY COA DATE
INSPECTOR'S ACCEPTANCE BY DATE
FIELD VERIFICATION BY C.O.A. DATE
DRAWINGS CORRECTED BY E.A.I. DATE 8-93
MICRO-FILM INFORMATION
RECORDED BY DATE
NO

BENCH MARKS
NM448-NIA ELEV 5091.89
ACS BRASS CAP IN MONUMENT BOX, LOCATED 7.6' SOUTH & 46' WEST OF THE COORS BLVD MEDIAN NOSE ON THE NORTH SIDE OF THE COORS BLVD./CENTRAL AVE INTERSECTION.

SURVEY INFORMATION
FIELD NOTES

NO.	BY	DATE
TOPO	HUGG SURV CO., INC.	08/05/9

ENGINEER'S SEAL
REGISTERED PROFESSIONAL ENGINEER NEW MEXICO 5110 JEAN J. BORDENAVE

NO.	DATE	REMARKS	BY
1	7/92	MH STA, GRADE, PIPE SIZE, HYDRAULICS	YSF
2	1/93	RELOCATE CB AT STA 32+00 TO 31+81	RPB

REVISIONS

DESIGN
DESIGNED BY JJB DATE 10/91
DRAWN BY MET DATE 11/91
CHECKED BY JJB DATE 10/91

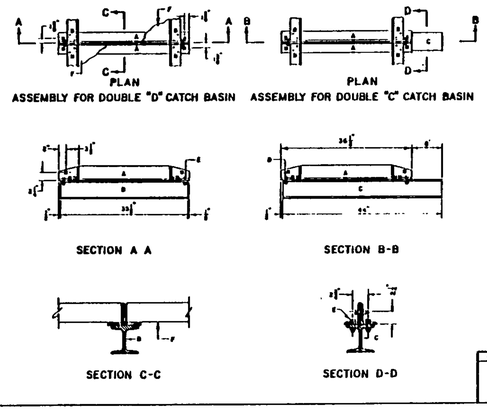
CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING GROUP

TITLE:
AIRPORT DR. STORM DRAIN

APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
DRC Chair	Roger L. Green	9-29-92			
Trans Dev	[illegible]	9-24-92			
Utility Dev	[illegible]	9-24-92			
Hydrology	[illegible]	9-28-92			

DRAWING NO. 4383.90 | MAP NO. K-10 | SHEET 3 OF 8

081093



GENERAL NOTES:

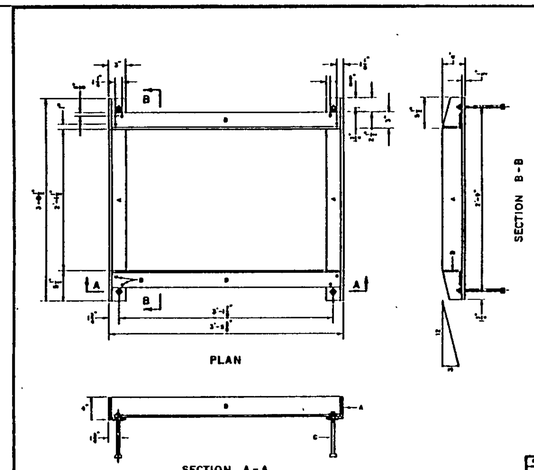
1. ALL BOLTS USED IN CENTER SUPPORT ASSEMBLY SHALL BE ½"
2. FRAME MAY BE RIVETED OR WELDED
3. BOLTS (NOT RIVETS OR WELDS) SHALL BE USED TO JOIN TWO OR MORE FRAMES TOGETHER AND TO THE W' BEAM
4. AFTER CLEANING SURFACE OF SCALE, RUST, ETC., GRATING, FRAME AND CENTER SUPPORT SHALL BE PAINTED WITH ONE SHOP COAT RED OXIDE, TWO FINISH COATS ALUMINUM PAINT (ASTM D 62)
5. FOR DOUBLE TYPE CATCH BASIN, MOVE ONE END WALL TO FORM NEW SINGLE GRATE CATCH BASIN

CONSTRUCTION NOTES:

A. 4" x 3" x ½" [x 36 [.
B. 3 [x 3" x ½" x 40 [.
C. 5 x 5 WF 18 S FLANGE BEAM, FOR CATCH BASIN TYPE DOUBLE "C"
D. 5 x 5 WF 18 S FLANGE BEAM, FOR CATCH BASIN TYPE DOUBLE "D"
E. ½" BOLTS, WITH NUTS TO SECURE ANGLE TO BEAM
F. FOR FRAME & GRATE SEE DWGS 2214, 2220, 2221

REVISIONS

CITY OF ALBUQUERQUE
DRAINAGE
STORM INLET
CENTER SUPPORT ASSEMBLY
DWG 2215
AUG. 1986



GENERAL NOTES:

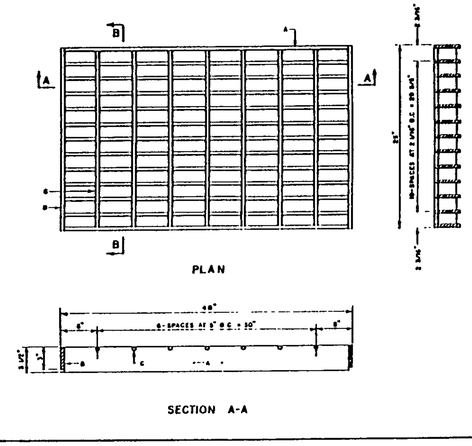
1. ALL EXPOSED METAL PARTS SHALL BE PAINTED PRIOR TO ASSEMBLY. WELDING, MACHINING AND DRILLING SHALL BE DONE PRIOR TO PAINTING. ALL DIMENSIONS ARE FINISH DIMENSIONS
2. ALL PARTS SHALL BE OF STRUCTURAL STEEL, GRADE 36
3. FOR CLEANING AND PAINTING OF FRAME SEE DWG. 2215, GENERAL NOTE NO 4
4. FRAME MAY BE WELDED OR RIVETED

CONSTRUCTION NOTES:

A. 4" x 3" x ½" x 5'-11½" ∠
B. 3 3/8" RIVETS AT EACH CORNER, SEE GENERAL NOTE NO 5
C. ¾" x 2" x 8" BOLTS WITH SQUARE HEAD & NUT AT EACH CORNER FOR ANCHORING FRAME INTO CONCRETE WALL
D. 3 1/2" x 3" x 3/8" x 3'-4 3/8" ∠

REVISIONS

CITY OF ALBUQUERQUE
DRAINAGE
STORM INLET FRAME
DWG. 2216
AUG 1986



GENERAL NOTES:

1. ALL BARS SHALL BE STRUCTURAL GRADE STEEL, GRADE 436
2. THE GRATE SHALL BE WELDED WITH 1/8" FILLET WELD AROUND BOTH SIDES OF CROSS BARS. 1/4" FILLET WELD BOTH SIDES OF BEARING BARS TO END BARS.
3. AFTER CLEANING SURFACE OF SCALE, RUST, OILS, ETC., PAINT GRATE WITH ONE SHOP COAT RED OXIDE, TWO FINISH COATS ALUMINUM PAINT (ASTM D 62)
4. TOP OF CROSS BARS SHALL BE FLUSH WITH TOP OF GRATE
5. GRIND WELDS FLUSH WITH BEARING BARS
6. WHEN INSTALLED IN FRAME, PUSH FRAME TO ONE SIDE, OTHER SIDE SHALL HAVE 1/2" MAX OPENING. SPACERS NEEDED TO FRAME MAY BE USED IF REQUIRED TO KEEP 1/2" SPACE ON LESS

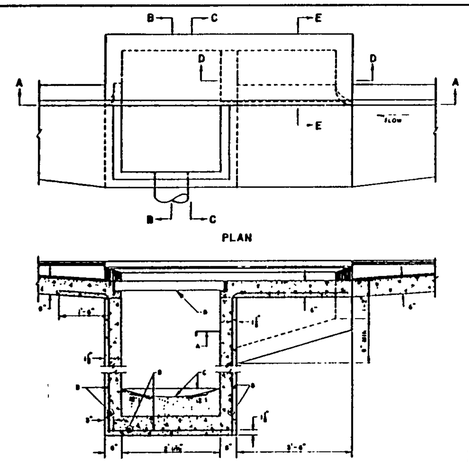
CONSTRUCTION NOTES:

A. BEARING BARS, (13) 1/2" Ø X 3 1/2" X 35"
B. END BARS, (2) 1/2" Ø X 3" X 25"
C. CROSS BARS, (3) 1/2" DIA. X 24

FLOW AREA = 67.4 SF

REVISIONS

CITY OF ALBUQUERQUE
DRAINAGE
STORM INLET
ALBUQUERQUE GRATE
DWG 2220
AUG. 1986



GENERAL NOTES:

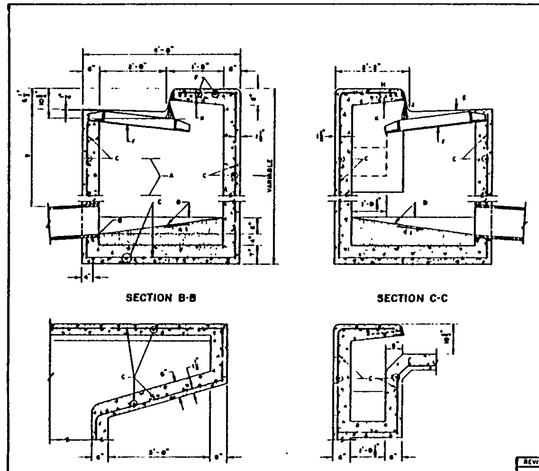
1. SEE DWG 2202 FOR TYPE "A" INLET SECTIONS
2. FOR STORM INLET GUTTER TRANSITION, SEE DWG 2201
3. OUTLET PIPE SIZE, PER DESIGN REQUIREMENT
4. FOR FRAME & GRATING, SEE DWG 2216, 2220 & 2221

CONSTRUCTION NOTES:

A. FOR STORM INLET DEPTHS GREATER THAN 6", INSTALL STD STEPS, SEE DWG 2229.
B. #4 ⊓ BARS AT 6" ⊓ C EACH WAY
C. CONCRETE FILL, MINIMUM SLOPE SHOWN IN SECTION A-A
D. GRATE

REVISIONS

CITY OF ALBUQUERQUE
DRAINAGE
STORM INLET TYPE "A"
PLAN AND SECTION A-A
DWG 2201
AUG 1986



GENERAL NOTES.

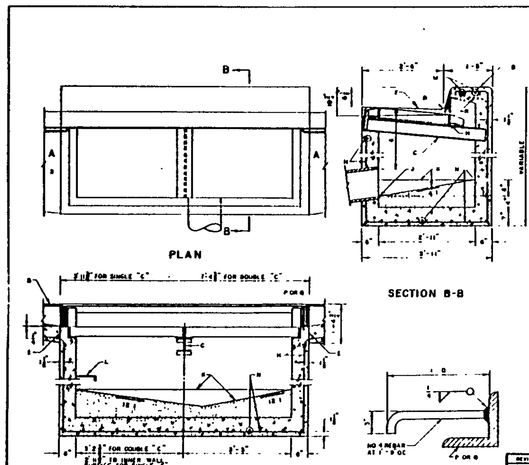
1. SEE DWG 2201 FOR PLAN AND SECTION A-A
2. GENERAL NOTES 2, 3 & 4 ON DWG 2201 ALSO APPLY TO THIS DWG
3. FOR ANCHOR DETAIL, SEE DWG 2204

CONSTRUCTION NOTES:

A. STORM INLET STEPS, SEE DWG 2229 FOR SPACING
B. 1" 18" MIN UNLESS OTHER WISE DIRECTED
C. #4 ⊓ BARS AT 6" ⊓ C EACH WAY.
D. CONCRETE FILL, MINIMUM SLOPES SHOWN IN SECTIONS
E. NORMAL GUTTER
F. GRATE FRAME
G. INVERT ELEVATION PER DESIGN
H. TOP OF CURB
J. FLOWLINE
K. ANGLE ANCHOR

REVISIONS

CITY OF ALBUQUERQUE
DRAINAGE
STORM INLET TYPE "A"
SECTIONS B-B, C-C, D-D & E-E
DWG 2202
AUG 1986



GENERAL NOTES

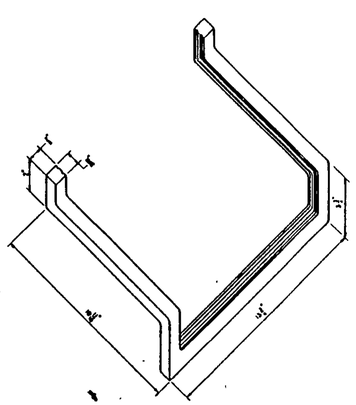
1. FOR SINGLE GRATE TYPE STORM INLET DETAIL CENTER SUPPORT AND MOVE ONE END WALL TO FORM NEW SINGLE GRATE INLET
2. FOR STORM INLET GUTTER TRANSITION, SEE DWG 2201
3. OUTLET PIPE SIZE PER DESIGN REQUIREMENT
4. FOR FRAME & GRATING, SEE DWG 2216, 2220 & 2221
5. FOR ANCHOR SEE DETAIL
6. FOR CENTER SUPPORT ASSEMBLY, SEE DWG 2215

CONSTRUCTION NOTES:

A. GUTTER TRANSITION
B. TOP OF CURB
C. CENTER SUPPORT ASSEMBLY
D. FLOWLINE
E. CONSTRUCTION JOINT
F. NORMAL GUTTER LINE
G. 1" 18" MIN UNLESS OTHERWISE DIRECTED
H. FRAME AND GRATE
J. INVERT OF OUTLET PIPE
K. CONCRETE FILL MINIMUM SLOPES AS SHOWN
L. FOR STORM INLET DEPTHS GREATER THAN 6" INSTALL STD STEPS, SEE DWG 2229 UPSTREAM SIDE
M. EXTEND #4 ⊓ BARS 18" INTO CURB ON EACH SIDE OF STORM INLET
N. #4 ⊓ BARS AT 6" ⊓ C
P. 3 1/2" Ø X 3 1/2" X 1/2" X 6" 8" FOR SINGLE GRATE TYPE "A" STORM INLET
Q. 3 1/2" Ø X 3 1/2" X 1/2" X 3" 6" FOR DOUBLE GRATE TYPE "A" STORM INLET
R. ANCHOR

REVISIONS

CITY OF ALBUQUERQUE
DRAINAGE
STORM INLET DOUBLE "C"
DWG 2205
AUG 1986

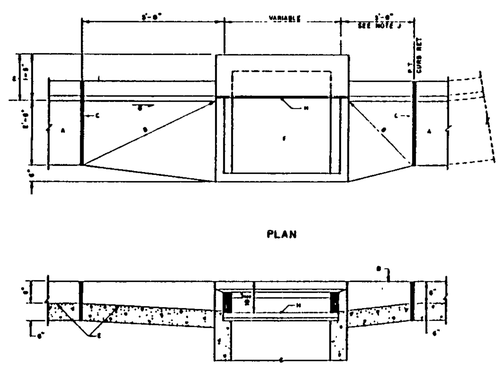


GENERAL NOTES:

1. ALUMINUM STEP ALCOA NO 126536 OR APPROVED EQUAL. STEPS TO BE PLACED AS NOTED ON PLANS
2. STORM INLETS: INLETS GREATER THAN 6" DEEP SHALL HAVE ALUMINUM STEPS INSTALLED ON UPSTREAM FACE OF INLET WALLS. STEPS SHALL PROJECT 3" FROM THE WALL AND BE CENTERED 12" FROM FACE OF CURB. STEPS SHALL BE 12" APART, WITH THE TOP STEP 1'0" FROM TOP OF GRATE AND THE BOTTOM STEP NO MORE THAN 16" ABOVE THE CONCRETE FILL IN THE BOTTOM OF THE INLET
3. DRAINAGE CHANNELS: CHANNELS SHALL HAVE ALUMINUM STEPS FOR ACCESS AND REMOVE INSTALLED PER DETAILS ON DWG. 2201. STEPS SHALL BE INSTALLED ON BOTH SIDES OF THE CHANNEL AND SHALL BE LOCATED IMMEDIATELY BEFORE THE INLET AND AFTER OUTLET TRANSITIONS. FOR CROSSING STRUCTURES, AND AT 200' MAXIMUM SPACING ALONG CHANNELS

REVISIONS

CITY OF ALBUQUERQUE
DRAINAGE
ALUMINUM STEP DETAIL
DWG 2229
AUG 1986



GENERAL NOTES

1. DETAILS FOR PLACING CATCH BASINS STANDARD CURB AND GUTTER

CONSTRUCTION NOTES:

A. STANDARD CURB AND GUTTER
B. STANDARD GRADE
C. EXPANSION JOINT
D. TOP OF CURB
E. FLOWLINE
F. FOR FRAME & GRATE SEE DWG 2216, 2220 & 2221
G. DIRECTION OF FLOW
H. POINT OF MEASUREMENT FOR TOP OF GRATE ELEVATION
J. PROVIDE 5 FEET TRANSITION EACH SIDE OF CATCH BASIN, WHEN INSTALLING AT SAG POINT OR INSTALLATIONS OTHER THAN AT CURB RETURN

REVISIONS

CITY OF ALBUQUERQUE
DRAINAGE
STORM INLET
GUTTER TRANSITION
DWG 2207
AUG 1986

RECORD DRAWING

I, Ronald P. Bohannan, hereby certify that this drawing has been revised to incorporate the as-constructed information furnished by the City of Albuquerque PWD Construction Management Division.

RONALD P. BOHANNAN NEW MEXICO 9814 REGISTERED PROFESSIONAL ENGINEER

Ronald P Bohannan 8/12/93
Ronald P Bohannan
N.M.P.E. No 9814

AS BUILT INFORMATION
CONTRACTOR SUNDANCE MECHANICAL
WORK STAKED BY C.O.A. DATE
INSPECTOR'S ACCEPTANCE BY DATE
FIELD VERIFICATION BY C.O.A. DATE
DRAWINGS CORRECTED BY EAI DATE 8/93
MICRO-FILM INFORMATION
RECORDED BY DATE
NO

BENCH MARKS

SURVEY INFORMATION
FIELD NOTES

NO.	BY	DATE

ENGINEER'S SEAL
REGISTERED PROFESSIONAL ENGINEER NO 9110 STATE OF NEW MEXICO RONALD P. BOHANNAN

NO.	DATE	REMARKS	BY

REVISIONS

DESIGN
DESIGNED BY DATE
DRAWN BY DATE
CHECKED BY DATE

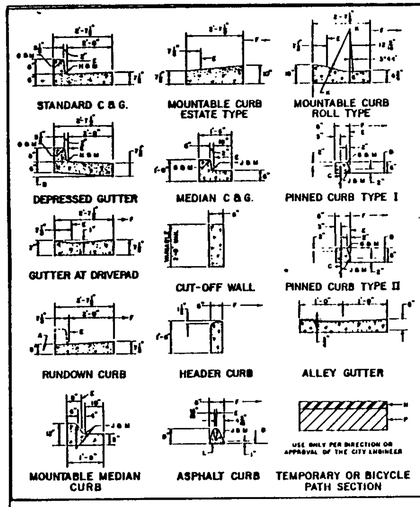
CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING GROUP

TITLE: **CONSTRUCTION DETAILS**

APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
DRC Chair	Regina Wood	1-29-92			
Trans Dev	R. Bourk	3-24-92			
Utility Dev	[illegible]	3-26-92			
Hydrology	G. Ohlen	9-28-92			

DRAWING NO.	MAP NO	SHEET	OF
4383.90	K-10	4	8

081093



GENERAL NOTES

1. CURBS, GUTTERS & CUT OFF WALL TO BE CONSTRUCTED W/ P.C.C.
2. FOR STANDARD AND MEDIAN C&G PROVIDE CONTRACTION JTS 6' O.C. MAX., ALSO PROVIDE 1/2" EXP. JTS 48' O.C. MIN. AT CURB RETURNS & AT EACH SIDE OF DRIVEWAY
3. FOR ALL OTHER C & G PROVIDE CONTR. JTS AT 10' O.C., PROVIDE EXP. JTS 50' O.C. & ADJACENT TO BUILDINGS & WALLS
4. EDGES NOT SPECIF. DIMENSIONED SHALL BE EDGED WITH A 3/8" EDGING TOOL
5. STD. C & G. SHALL BE USED FOR NEW CONSTR. UNLESS OTHERWISE APPROVED BY THE ENGINEER
6. REMOVE & REPLACE 4" WIDE STRIP OF PAVEMENT BEYOND LIP OF GUTTER WHEN CONSTRUCTING C & G ADJACENT TO EXIST. A.C. PAVEMENT
7. STD. C & G. REQUIRE FULL FORM ON ALL FACES EXCEPT WITH PRIOR APPROVAL OF ENGINEER

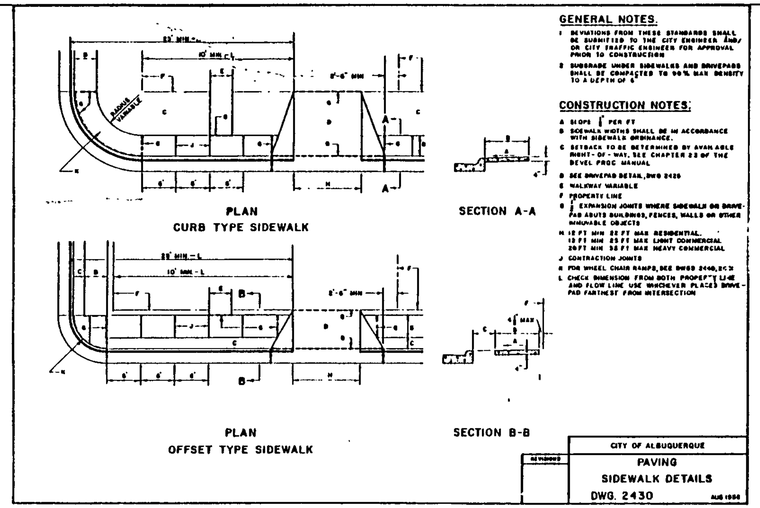
CONSTRUCTION NOTES:

A. NEW CONC. CHANNEL LINING, OR CUT OFF WALL PROVIDE 1/2" EXP. JT. BETWEEN BACK OF CURB & CONC. LINING OR WALL
B. VARIABLE, DEPTHS AS NEEDED
C. DRILL NO. 5 BARS 18" DEEP IN HOLES DRILLED 3 O.C. IN EXIST. PAVEMENT SEAL WITH EPOXY
D. EXIST. A.C. OR P.C.C. PAVEMENT
E. THEORETICAL FACE OF CURB OR FLOWLINE
F. TRAFFIC SIDE
G. 3/4" RADIUS
H. 1 1/2" RADIUS
J. 2" RADIUS
K. 24" RADIUS
L. TACK COAT
M. DIMENSIONS AT ROUNDED CORNERS MEASURED TO INTERSECTION OF STRAIGHT LINES
N. 2" A.C. SURFACE COURSE 1800 LBS. STABILITY
P. 6" COMPACTED SUBGRADE 90% COMPACTION

REVISIONS

CITY OF ALBUQUERQUE

PAVING
CURB AND GUTTER
& TEMPORARY PAVING SECTION
DWG 2415 AUG 1986



GENERAL NOTES:

1. DEVIATIONS FROM THESE STANDARDS SHALL BE SUBMITTED TO THE CITY ENGINEER AND/OR CITY TRAFFIC ENGINEER FOR APPROVAL PRIOR TO CONSTRUCTION
2. SUBGRADE UNDER SIDEWALKS AND DRIVEPADS SHALL BE COMPACTED TO 90% MAX DENSITY TO A DEPTH OF 6"

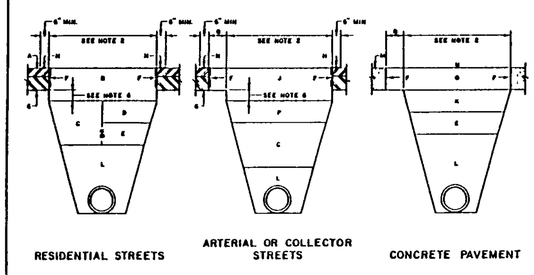
CONSTRUCTION NOTES:

A. SLOPE 1/4" PER FT
B. SIDEWALK WIDTHS SHALL BE IN ACCORDANCE WITH SIDEWALK ORDINANCE.
C. SETBACK TO BE DETERMINED BY AVAILABLE RIGHT-OF-WAY. SEE CHAPTER 23 OF THE DEVEL. PROC. MANUAL
D. SEE DRIVEPAD DETAIL, DWG 2426
E. WALKWAY VARIABLE
F. PROPERTY LINE
G. 1/2" EXPANSION JOINTS WHERE SIDEWALK OR DRIVEPAD ABUTS BUILDINGS, FENCES, WALLS OR OTHER IMMOVABLE OBJECTS
H. 10 FT MIN. 20 FT MAX. RESIDENTIAL.
15 FT MIN. 25 FT MAX. LIMIT COMMERCIAL
20 FT MIN. 30 FT MAX. HEAVY COMMERCIAL
J. CONTRACTION JOINTS
K. FOR WHEEL CHAIR RAMPS, SEE DWGS 2440, 2442
L. CHECK DIMENSION FROM BOTH PROPERTY LINE AND FLOW LINE. USE WHICHEVER PLACES DRIVEPAD FARTHEST FROM INTERSECTION

REVISIONS

CITY OF ALBUQUERQUE

PAVING
SIDEWALK DETAILS
DWG. 2430 AUG 1986



GENERAL NOTES:

1. Composition as determined by ASTM D 1557 max density
2. Trench cut widths shall be min. width req'd for utility installation, as specified but not compaction and compliance with current and applicable safety regulations
3. All pavement cut edges will be trimmed to present an even line prior to replacement of paving materials. Notch cutting of pavement will not be permitted
4. For residential streets, asphalt base course surface course shall be 1 1/2 lb 1500 lb stab. The remainder shall be 1500 lb. stab. asphalt base course
5. For arterial or collector streets, asphalt base, surface course shall be 1 1/2 2" 1500 lb stab. The remainder may be 1000 or 1500 lb stab. asphalt base course
6. Additional 2" thickness of asphalt base, if on pavement cuts less than 2 miles or long than 300 feet. For asphalt surf. pavement less 5' or more in width and longer than 100' shall be paved with thermal material to a depth equal to that of asphalt base removed or to the depth shown on STD. 2406, 240, 2406 for appropriate pavement section, which ever is greater.

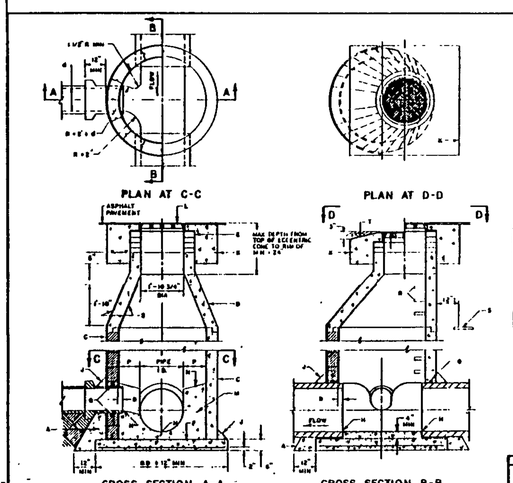
CONSTRUCTION NOTES:

A. 2"-6" EXIST. ASPHALT SURFACE COURSE
B. 4"-6" 1800 LB. STAB. ASPHALT CONC. TO BE 2" THICKER THAN EXIST. PAVEMENT, SEE NOTES 4 & 6
C. 12" COMPACTED SUBGRADE MATERIAL, PLACED IN 2-6" LIFTS, 95% COMPACTION
D. 6" SUBBASE MATERIAL, 95% COMPACTION.
E. 6" SUBBASE MATERIAL, 95% COMPACTION
F. SAWCUT OR BLADECUT ASPHALT PAVEMENT. SAWCUT ONLY ONE THIRD CONC. PAVEMENT DEPTH
G. EXIST. ASPHALT PAVEMENT
H. TACK COAT
J. 4"-6" ASPHALT CONC. TO BE 2" THICKER THAN EXIST. PAVEMENT. SEE NOTES 4 & 6
K. 6" CONC. TREATED BASE (CTB)
L. SUBGRADE MATERIAL, 90% COMPACTION
M. EXIST. CONC. PAVEMENT
N. JOINTS TO BE TOOLED & SEALED IN ACCORDANCE WITH ENGINEER'S REQUIREMENTS
O. TO MATCH EXIST. THICKNESS, 6" MIN. 4000 PSI.
P. 6" CTB, 4" ATB ON 4" ASPHALT CONC. BASE COURSE 1500 LB STAB
Q. 12" CUT BACK, ONLY APPLICABLE TO FED. HWY AND MAS-ID FUNDED PROJECTS

REVISIONS

CITY OF ALBUQUERQUE

PAVING
CITYWIDE PAVEMENT CUTS
FOR ALL UTILITIES
DWG 2461 AUG 1986



GENERAL NOTES

1. TYPE E MH NOT TO BE USED FOR DEPTHS LESS THAN 6' MEASURED FROM RIM TO INV.
2. MH GREATER THAN 10 M DEPTH SHALL BE OF PRECAST CONC. SECTIONS ONLY
3. DESIGN APPLIES TO 4 AND 5 FT MANHOLES
4. USE THIN SHRINK GROUT FOR JOINTS, FILLETS & PIPE PENETRATIONS
5. COMPACT ALL BACKFILL AROUND MH TO 95%
6. POSITION MH OPENING OVER THE UPSTREAM SIDE OF MAIN LINE

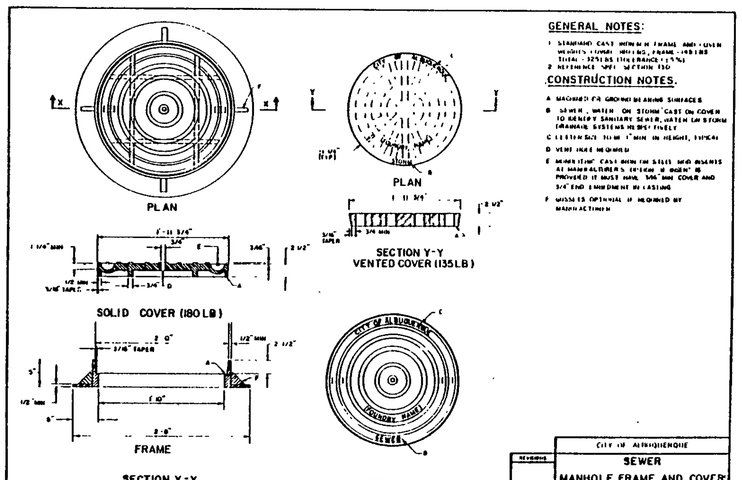
CONSTRUCTION NOTES:

A. CONCRETE PIPE SUPPORTS SHALL EXTEND OUTSIDE OF MH TO BELL OF FIRST JOINT AND SHALL ENABLE PIPE TO SPRING LINE
B. PIPE PENETRATION INTO MANHOLE SHALL BE FLUSH TO 2" MAX. RE-SURLU AT SPRINGLINE OF PIPE
C. USE MAX 4 COURSES OF MS BRICK ON THE PAVED STREETS FOR FUTURE ADJ. OF FRAME TO PAVEMENT GRADE. PLASTER INSIDE WITH 1/2 MORTAR
F. BASE TO BE POURED IN PLACE USING NO. 4 BARS AS A CAGE FOR MH DEPTH OF 10 OR GREATER. NO BARS FOR MH DEPTH OF 12 OR LESS. MIN. 15" DEEP
H. INV. ELEV. OF STUB OR LATERAL AS SHOWN ON PLANS
J. 6" GROUT FILLET ON UPPER HALF OF PIPE AND AROUND BASE
K. USE A 8' x 5' CONCRETE PAD IN ALL AREAS
L. MH FRAME AND COVER, SEE DWG 2110
M. CONCRETE FILL, 3000 PSI
N. SLOPE 1 PER 12 FROM PIPE CROWN
P. SHELF TO BE 8" WIDE MIN.
Q. APPROVED WATERSTOP TO BE WITH TYPE OF PIPE
R. STEPS TO BE INSTALLED AS PER SPEC SECTION 02041
S. END (IN UNPAVED AREAS)
T. IN UNPAVED AREAS SET FRAME TO GRADE AND SLOPE TOP OF PAD

REVISIONS

CITY OF ALBUQUERQUE

SEWER
MANHOLE TYPE "E"
DWG 2102 AUG 1986



GENERAL NOTES:

1. STANDARD CAST IRON MH FRAME AND COVER WEIGHTS (COVER, RING, FRAME - 180 LBS TOTAL - 325 LBS. (TOLERANCE - 5%)
2. REFERENCE SPEC. SECTION 7310

CONSTRUCTION NOTES.

A. MACHINED FOR GROUND BEARING SURFACES
B. SEWER, WATER OR STORM CAST ON COVER TO REMOVE SANITARY SEWER, WATER OR STORM DRAINAGE SYSTEMS RESPECTIVELY
C. LETTER SIZE TO BE 1" MIN. IN HEIGHT, TYPICAL
D. VENT HOLE REQUIRED
E. MANUFACTURE CAST IRON SALES AND ASSISTS AT MANUFACTURER'S OPTION IF DESIRED IS PROVIDED IT MUST HAVE 3/16" MIN. COVER AND 3/4" END EMBEDMENT INCREASING
F. WASHER OPTIONAL IF REQUIRED BY MANUFACTURER

REVISIONS

CITY OF ALBUQUERQUE

SEWER
MANHOLE FRAME AND COVER
DWG 2110 AUG 1986

RECORD DRAWING
I, Ronald P. Bohannan, hereby certify that this drawing has been revised to incorporate the as-constructed information furnished by the City of Albuquerque PWD Construction Management Division.

REGISTERED PROFESSIONAL ENGINEER RONALD P. BOHANNAN 9814

Ronald P. Bohannan
N.M.P.E. No. 9814

AS BUILT INFORMATION

CONTRACTOR SUNDANCE MECHANICAL
STAKED BY C.O.A. DATE
INSPECTOR'S ACCEPTANCE BY DATE
FIELD VERIFICATION BY C.O.A. DATE
DRAWINGS CORRECTED BY EAI DATE 8-25
MICRO-FILM INFORMATION
RECORDED BY DATE
NO.

BENCH MARKS

SURVEY INFORMATION
FIELD NOTES

NO.	BY	DATE

ENGINEER'S SEAL

REGISTERED PROFESSIONAL ENGINEER RONALD P. BOHANNAN NO. 5110 STATE OF NEW MEXICO

NO.	DATE	REMARKS	BY
		REVISIONS	

DESIGNED BY DATE
DRAWN BY DATE
CHECKED BY DATE

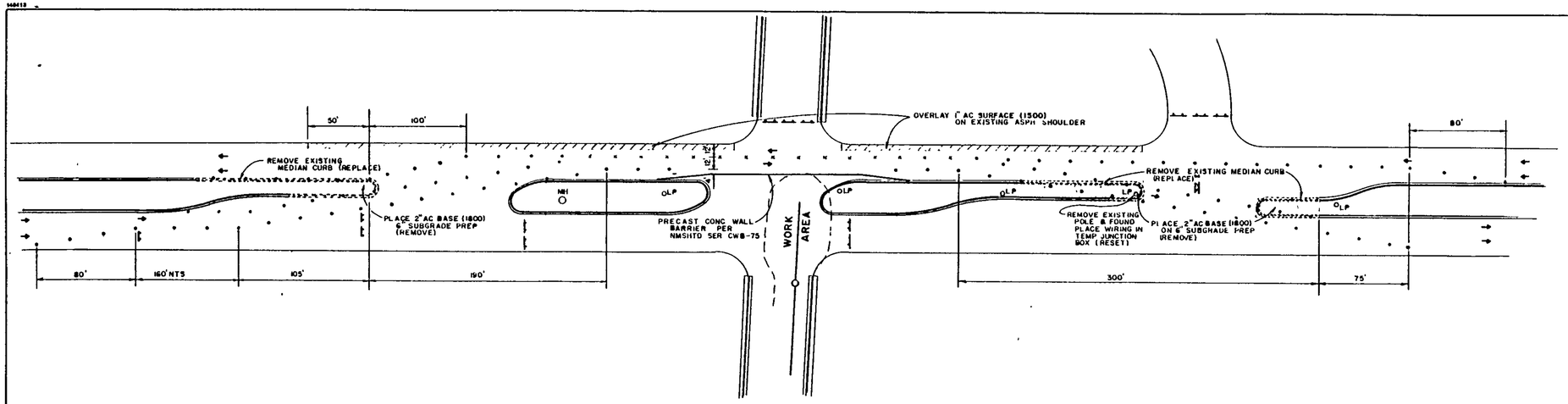
CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING GROUP

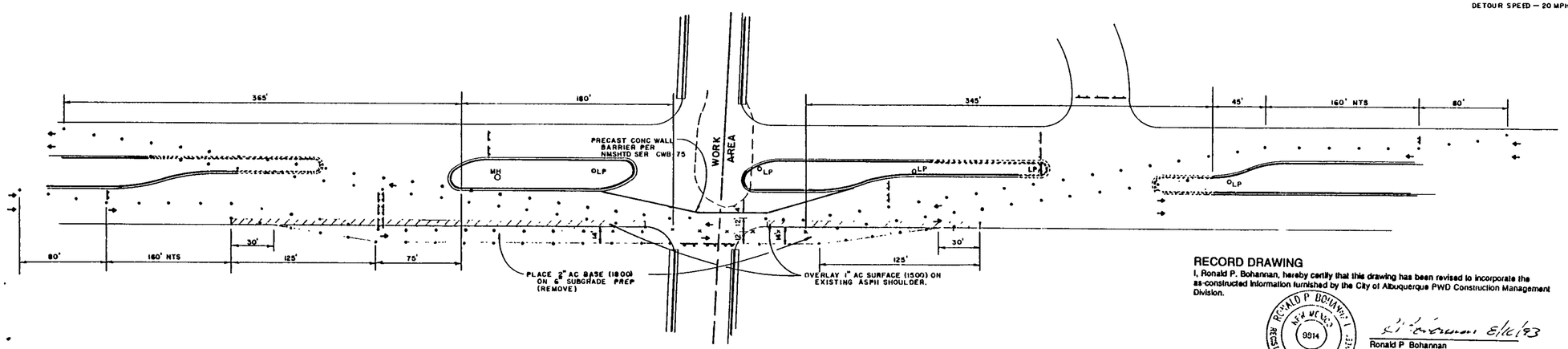
TITLE: **CONSTRUCTION DETAILS**

APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
DRC Chair		9-15-92			
Trans Dev		9-28-92			
Utility Dev		9-28-92			
Hydrology		9-28-92			

DRAWING NO	MAP NO	SHEET	OF
4383.90	K-10	5	8

081093





N
1"=50'
DETOUR SPEED — 20 MPH

LEGEND

LP	LIGHT POLE
MH	MANHOLE
•	BARREL
X	VERTICAL PANEL
	TYPE III BARRICADE

NOTE

TRAFFIC CONTROL SHOWN ON THIS SHEET IS CHANNELIZATION DEVICES ONLY. DETAILS SHOWN ON SHEETS 7 AND 8 OF THIS PLAN SET SHALL BE USED TO ESTABLISH TYPE AND LOCATION OF WARNING AND REGULATORY SIGNS. SPEED REDUCTION SIGNS APPROACHING CONSTRUCTION ZONE PER MUTCD

RECORD DRAWING

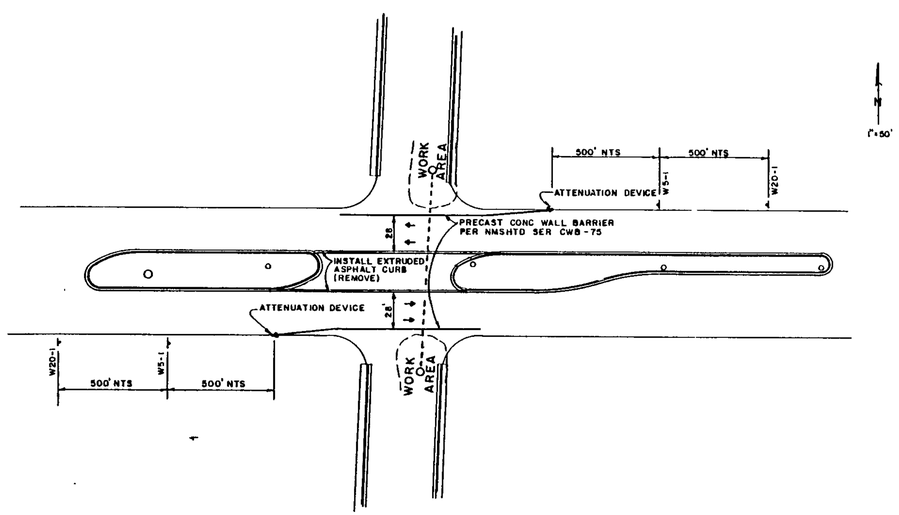
I, Ronald P. Bohannan, hereby certify that this drawing has been revised to incorporate the as-constructed information furnished by the City of Albuquerque PWD Construction Management Division.

RONALD P. BOHANNAN REGISTERED PROFESSIONAL ENGINEER N.M. 9814

Ronald P Bohannan 8/16/93
Ronald P Bohannan
N.M.P.E. No 9814

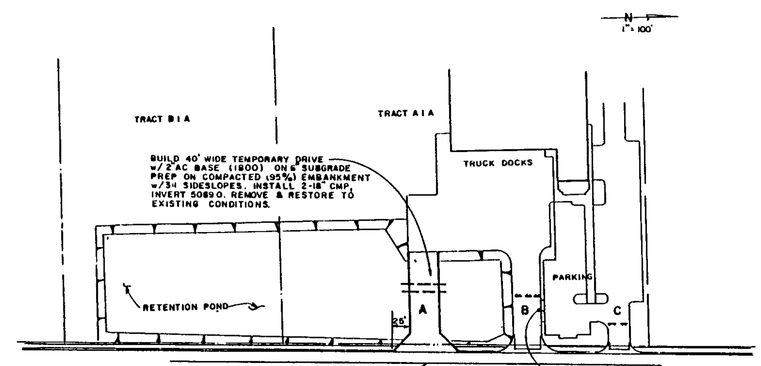
SCHEDULE B - AIRPORT DRIVE/CENTRAL AVE. - TRAFFIC CHANNELIZATION

SCHEDULE A- AIRPORT DR./CENTRAL AVE.- TRAFFIC CHANNELIZATION



N
1"=50'

TEMPORARY ACCESS - ZANIOS FOODS



N
1"=100'

NOTES

1. DRIVE 'A' SHALL BE CONSTRUCTED PRIOR TO ANY WORK COMMENCING WITHIN 50' OF EITHER DRIVE 'B' OR DRIVE 'C'.
2. DRIVE 'A' SHALL REMAIN UNTIL BOTH DRIVE 'B' AND DRIVE C' ARE ACCESSIBLE ON A PERMANENT BASIS
3. EITHER DRIVE 'B' OR DRIVE 'C' SHALL BE ACCESSIBLE AT ALL TIMES
4. THE 2-18" CMP WILL BE CONSIDERED THE PROPERTY OF THE CONTRACTOR AND INCIDENTAL TO THE PROJECT. NO MEASUREMENT OR PAYMENT WILL BE MADE THEREFORE

AS BUILT INFORMATION
CONTRACTOR SUNDANCE MECHANICAL
WORK STAKED BY C.O.A. DATE
INSPECTED BY DATE
ACCEPTANCE BY DATE
FIELD VERIFICATION BY C.O.A. DATE
DRAWINGS CORRECTED BY EAI DATE 8/93
MICRO-FILM INFORMATION
RECORDED BY DATE
NO

BENCH MARKS

SURVEY INFORMATION
FIELD NOTES

NO.	BY	DATE

ENGINEER'S SEAL
RONALD P. BOHANNAN REGISTERED PROFESSIONAL ENGINEER NO 5110 STATE OF NEW MEXICO

REVISIONS

NO.	DATE	REMARKS	BY

DESIGN

DESIGNED BY	JJB	DATE 9/92
DRAWN BY	JJB	DATE 9/92
CHECKED BY	JJB	DATE 9/92

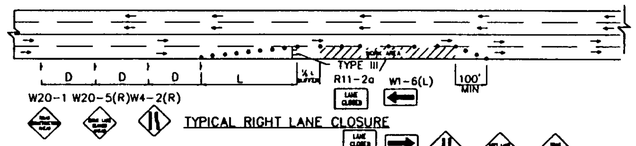
CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING GROUP

TITLE: **CONSTRUCTION TRAFFIC CONTROL**

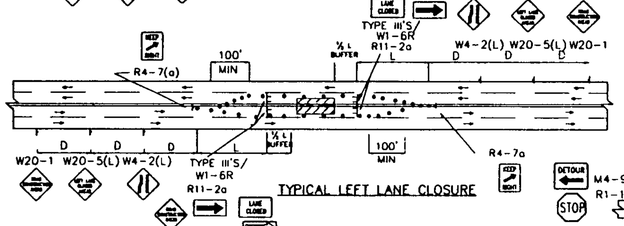
APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
DRC CHAIRMAN		9-24-92	WATER	N/A RWE	9-24-92
TRANSPORTATION	N/A	9-24-92	WASTE WATER	N/A RWE	9-24-92
HYDROLOGY		9-28-92			
CC		9-28-92			

PROJECT NO. 4383.90 | MAP NO. K·10 | SHEET 6 OF 8

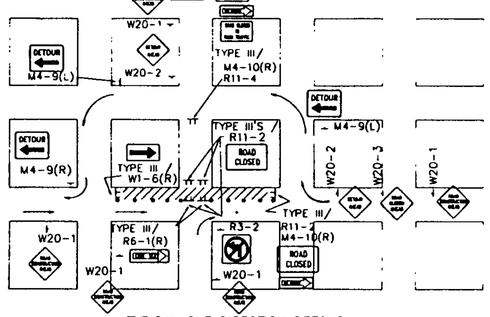
081093



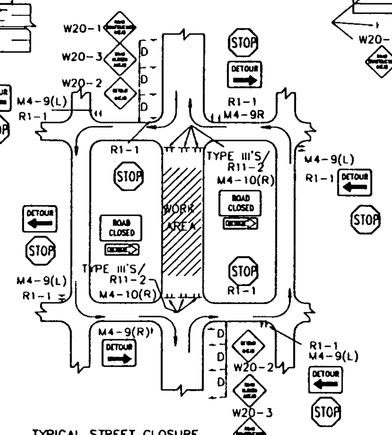
TYPICAL RIGHT LANE CLOSURE



TYPICAL LEFT LANE CLOSURE

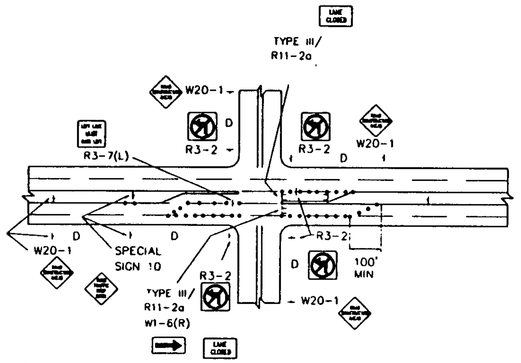


TYPICAL ONE DIRECTION DETOUR



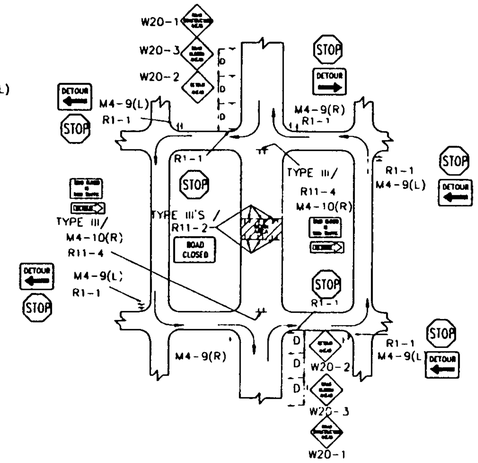
TYPICAL STREET CLOSURE

NOTE: (R1-1) BASED ON FIELD CONDITIONS.



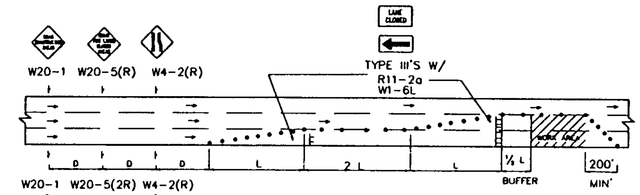
TYPICAL LANE CLOSURE AT INTERSECTION

NOTE. DEPENDING ON WORK ZONE LOCATION

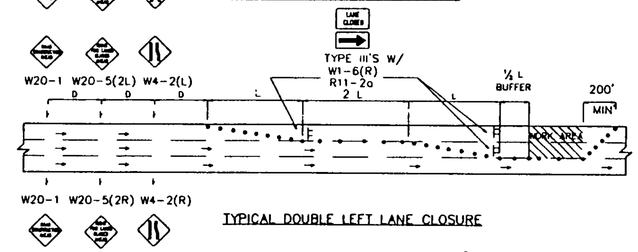


TYPICAL MID-BLOCK CLOSURE

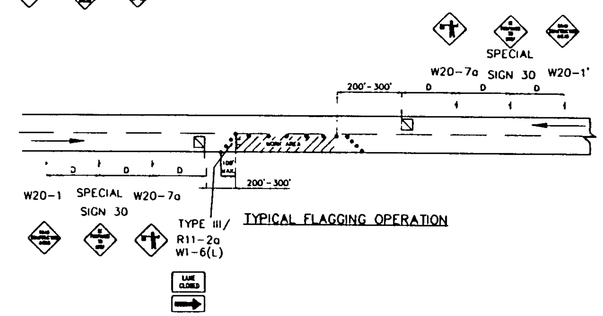
NOTE. (R1-1) BASED ON FIELD CONDITIONS



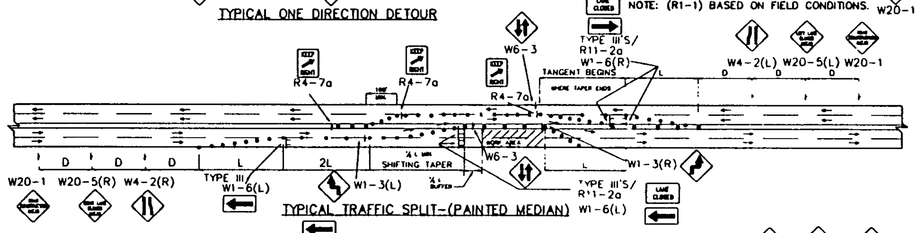
TYPICAL DOUBLE RIGHT LANE CLOSURE



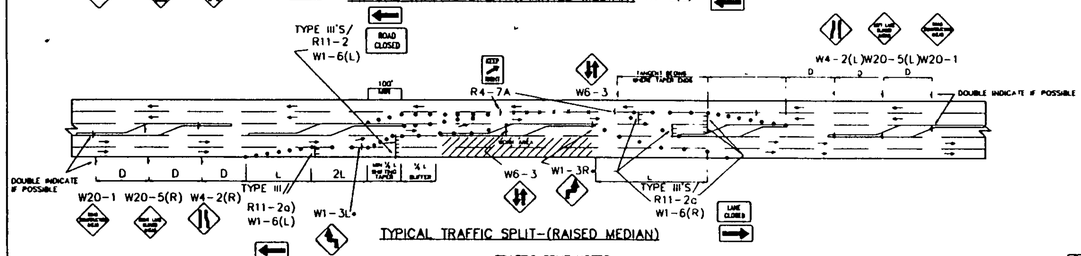
TYPICAL DOUBLE LEFT LANE CLOSURE



TYPICAL FLAGGING OPERATION



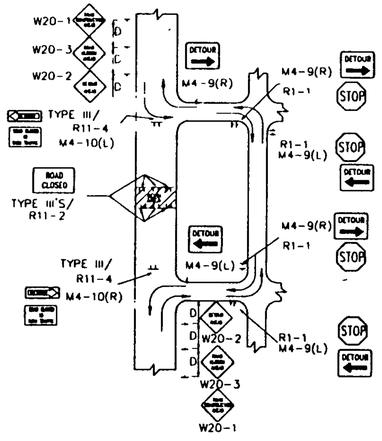
TYPICAL TRAFFIC SPLIT-(PAINTED MEDIAN)



TYPICAL TRAFFIC SPLIT-(RAISED MEDIAN)

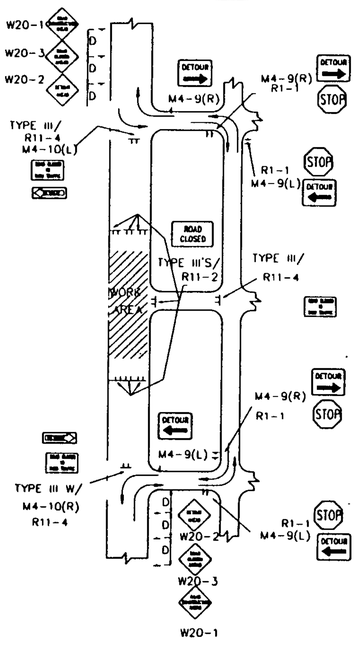
TRAFFIC SPLIT NOTES.

1. THE OFFSET DISTANCE MUST BE CALCULATED IN ALL SHIFTING TAPERS. THE OFFSET DISTANCES SHALL INCLUDE LANE WIDTHS PLUS MEDIAN WIDTHS.
2. ½ L IS MINIMUM DISTANCE FOR SHIFTING TAPERS.
3. REVERSE CURVES MAY BE IMPLEMENTED. ALL CURVE DATA SHALL BE CALCULATED
4. MEDIAN REMOVAL SHALL BE REQUIRED IF ½ L OR REVERSE CURVE IS NOT SUFFICIENT. MEDIAN REMOVAL SHALL TAKE PLACE BEFORE SPLITS
5. REDUCED SPEED MAY BE CONSIDERED.
6. * USE W1-3 FOR 30 MPH OR LESS, W1-4 FOR SPEED 35 MPH OR GREATER



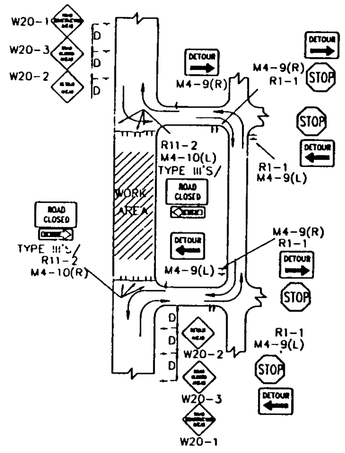
TYPICAL STREET CLOSURE

NOTE. (R1-1) BASED ON FIELD CONDITIONS.



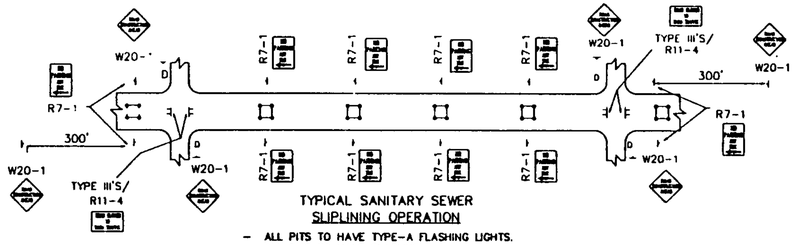
TYPICAL STREET CLOSURE

NOTE: (R1-1) BASED ON FIELD CONDITIONS.



TYPICAL STREET CLOSURE

NOTE: (R1-1) BASED ON FIELD CONDITIONS.



TYPICAL SANITARY SEWER SLIPLINING OPERATION

- ALL PITS TO HAVE TYPE-A FLASHING LIGHTS.
- ALL PITS TO HAVE FLAGLINE.

AS BUILT INFORMATION

CONTRACTOR | DATE
WORK STAKED BY | DATE
STAKES CHECKED BY | DATE
ACCEPTANCE BY | DATE
VERIFICATION BY | DATE
DRAWINGS CORRECTED BY | DATE

MICRO-FILM INFORMATION

RECORDED BY | DATE
NO.

BENCH MARKS

SURVEY INFORMATION

NO.	BY	DATE
	FIELD NOTES	

ENGINEER'S SEAL

RICARDO B. ROYBAL
STATE OF NEW MEXICO
REGISTERED PROFESSIONAL ENGINEER

NO.	DATE	REMARKS	BY
		REVISIONS	

DESIGNED BY RICARDO ROYBAL, P.E. DATE NOV. 1991
DRAWN BY C.A.D.D./W.L.B./A.F.V. DATE NOV. 1991
CHECKED BY DATE

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING GROUP

TITLE:

TRAFFIC CONTROL SIGNING EXAMPLES

APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
DRC CHAIRMAN		9-29-92	WATER		
TRANSPORTATION		3-24-92	WASTE WATER		
HYDROLOGY		9-28-92			

PROJECT NO.	MAP NO.	SHEET	OF
4383.90	K-10	7	8

01-14-92
CDA:TRAFF2.DWG

081093

CONSTRUCTION TRAFFIC CONTROL GENERAL NOTES

1. CONTRACTOR MUST OBTAIN FROM CONSTRUCTION COORDINATION AN EXCAVATION/BARRICADING PERMIT BEFORE ENGAGING IN ANY CONSTRUCTION, MAINTENANCE OR REPAIR WORK IN ANY OF THE CITY OF ALBUQUERQUE'S RIGHTS-OF-WAY. EMERGENCY WORK THAT WOULD PRESERVE LIFE OR PROPERTY IS EXCLUDED WITH THE UNDERSTANDING, THAT A PERMIT SHALL BE OBTAINED WITHIN 24 TO 48 HOURS

2. CONTRACTOR SHALL AT THE TIME OF PERMIT REQUEST, SUBMIT FOR APPROVAL BY CONSTRUCTION COORDINATION, A TRAFFIC CONTROL PLAN DETAILING ALL EXISTING TOPOGRAPHY SUCH AS LANE WIDTHS, DRIVEWAYS, AND BUSINESS/RESIDENTIAL ACCESSES. THE TRAFFIC CONTROL PLAN SHALL INCLUDE ALL PHASES OF WORK AND SCHEDULES INVOLVED IN THE CONSTRUCTION PROJECT. ANY SEPARATE PHASES OF A CONSTRUCTION PROJECT SHALL BE GIVEN AN INDIVIDUAL PERMIT EACH BLANKET PERMITS WILL NOT BE ISSUED

3. THESE TYPICAL TRAFFIC CONTROL PLANS DO NOT REFLECT THE EXISTING TOPOGRAPHY SUCH AS DRIVEWAYS, LANE WIDTHS, AND BUSINESS/RESIDENTIAL ACCESSES. EVERY LOCATION THAT REQUIRES CONSTRUCTION TRAFFIC CONTROL SHALL HAVE A DETAILED TRAFFIC CONTROL PLAN SHOWING ALL EXISTING TOPOGRAPHY.

4. CONSTRUCTION SHALL NOT BEGIN UNLESS A TRAFFIC CONTROL PLAN HAS BEEN APPROVED AND VERIFIED BY CONSTRUCTION COORDINATION

5. CONSTRUCTION COORDINATION SHALL BE NOTIFIED 48 HOURS PRIOR TO ANY TRAFFIC CONTROL CHANGES NEEDED BY CONTRACTOR, THAT WERE NOT PREVIOUSLY APPROVED. THESE TRAFFIC CONTROL CHANGES SHALL BE REQUESTED IN WRITING ACCOMPANIED WITH A TRAFFIC CONTROL PLAN REFLECTING SUCH CHANGES.

6. ALL CONSTRUCTION TRAFFIC CONTROL DEVICES SHALL COMPLY TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), LATEST EDITION IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO INSTALL, SERVICE AND MAINTAIN ALL TRAFFIC CONTROL DEVICES. TRAFFIC CONTROL DEVICES SHALL NOT BE REMOVED OR ALTERED IN ANY WAY WITHOUT THE APPROVAL OF CONSTRUCTION COORDINATION, PER SECTION GA-4 OF THE MUTCD, LATEST EDITION.

7. THE CONSTRUCTION TRAFFIC CONTROL INITIAL SET-UP SHALL BE BY AN AMERICAN TRAFFIC SAFETY SERVICES ASSOCIATION (ATSSA) CERTIFIED WORKSITE TRAFFIC SUPERVISOR. THE MAINTENANCE AND SERVICING SHALL ALSO BE DONE BY AN ATSSA CERTIFIED WORKSITE TRAFFIC SUPERVISOR OR EQUIVALENT.

8. CONTRACTOR IS RESPONSIBLE TO MAINTAIN AND SERVICE ALL TRAFFIC CONTROL DEVICES 24 HOURS A DAY, 7 DAYS A WEEK THROUGHOUT LENGTH OF PROJECT. CONTRACTOR IS RESPONSIBLE THAT ALL TRAFFIC CONTROL DEVICES COMPLY WITH THE MUTCD, LATEST EDITION.

9. ALL ADVANCE WARNING SIGNS SHALL BE DOUBLE INDICATED WHENEVER THERE ARE MULTI-LANE TRAFFIC IN ANY ONE GIVEN DIRECTION AND THERE IS SUFFICIENT MEDIAN SPACE.

10. ALL BARRICADES IN ALL TAPERS AND TANGENTS SHALL BE PLACED APART, A DISTANCE MEASURED IN FEET, EQUAL TO THAT OF THE POSTED SPEED LIMIT. NO EXCEPTIONS UNLESS APPROVED BY CONSTRUCTION COORDINATION PER MUTCD SECTION GA-4

11. CONTRACTOR SHALL NOT BEGIN WORK BEFORE 8:30 A.M. OR END WORK AFTER 4:00 P.M. WITHOUT THE APPROVAL OF CONSTRUCTION COORDINATION.

12. CONTRACTOR IS RESPONSIBLE TO PROVIDE CONSTRUCTION COORDINATION, A WEEKLY LOG OF DAILY INSPECTIONS OF BARRICADE AND MAINTENANCE SCHEDULES ON PROJECTS THAT ARE OVER ONE WEEK DURATION

13. EQUIPMENT OR MATERIALS SHALL NOT BE STORED WITHIN 15 FEET OF A TRAVELLED TRAFFIC LANE DURING NON-WORKING HOURS WITHOUT THE APPROVAL OF CONSTRUCTION COORDINATION.

14. CONTRACTOR SHALL PROVIDE AND MAINTAIN A SAFE AND ADEQUATE MEANS OF CHANNELIZING PEDESTRIAN TRAFFIC AROUND AND THROUGH THE CONSTRUCTION AREA.

15. CONTRACTOR IS RESPONSIBLE FOR OBLITERATION OF ANY CONFLICTING STRIPING AND RESPONSIBLE FOR ALL TEMPORARY STRIPING.

16. CONTRACTOR SHALL MAINTAIN ACCESS TO ALL FACILITIES, BUSINESSES AND/OR RESIDENTS AT ALL TIMES.

17. CONTRACTOR SHALL PROVIDE ACCESS SIGNS FOR BUSINESSES LOCATED WITHIN THE CONSTRUCTION AREA UNDER THE SUPERVISION OF CONSTRUCTION COORDINATION. EACH ACCESS SIGN SHALL HAVE 5 INCH, WHITE LETTERING ON BLUE REFLECTORIZED BACKGROUND WITH A 5/8" WHITE BORDER INSET 3/8". ACCESS SIGNS SHALL BE CONSIDERED INCIDENTAL TO THE BID AND NOT PART OF THE CONTRACT UNLESS OTHERWISE STATED. NO MORE THAN 3 BUSINESSES SHALL BE LISTED ON AN ACCESS SIGN. SHOPPING CENTERS AND MALLS SHALL BE LISTED AS SUCH.

18. ALL ADVANCE WARNING SIGNS SHALL MEET THE MINIMUM REFLECTIVE INTENSITY REQUIREMENTS SET FORTH BY THE CITY OF ALBUQUERQUE. CONSTRUCTION COORDINATION SHALL DETERMINE ALL REQUIREMENTS AND APPROVE OR DISAPPROVE ANY ADVANCE WARNING SIGN PER SECTION GA-4 OF THE MUTCD, LATEST EDITION.

19. 24 HOURS PRIOR TO OCCUPYING OR CLOSING OF A RIGHT-OF-WAY, CONTRACTOR SHALL NOTIFY: POLICE, FIRE DEPARTMENT, SCHOOLS, HOSPITALS, TRANSIT AUTHORITY, BUSINESSES AND/OR RESIDENTS THAT WILL BE AFFECTED BY THE CONSTRUCTION.

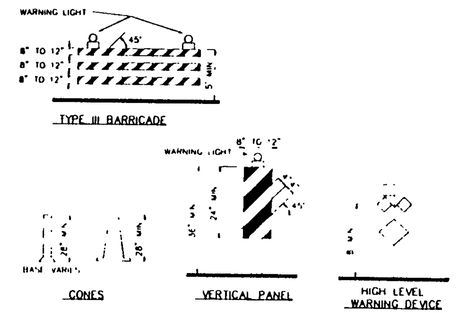
20. ANY FIELD ADJUSTMENTS SHALL BE APPROVED BY CONSTRUCTION COORDINATION.

21. EXCAVATIONS SHALL BE PLATED, TEMPORARILY PATCHED OR RESURFACED PRIOR TO OPENING OF TRAFFIC. A MINIMUM OF 11 FEET SHALL BE PROVIDED FOR TRAFFIC IN ANY GIVEN DIRECTION. CONTRACTOR IS RESPONSIBLE FOR ANY WORK INVOLVED IN SATISFYING THESE REQUIREMENTS

22. CONTRACTOR SHALL AT ALL TIMES COMPLY WITH THE FOLLOWING:
    1. STANDARDS AND REQUIREMENTS SET FORTH IN THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION.
    2. THE CITY OF ALBUQUERQUE TRAFFIC CODE, LATEST EDITION
    3. SECTION 19 OF THE CITY OF ALBUQUERQUE'S STANDARD SPECIFICATIONS FOR PUBLIC WORK CONSTRUCTION, AS WELL AS OTHER SECTIONS

23. FAILURE TO COMPLY WITH ANY OF THE ABOVE MENTIONED, WILL BE ADEQUATE CAUSE TO CEASE ALL WORK ON ANY CONSTRUCTION PROJECT WORK WILL NOT RESUME UNTIL ALL REQUIREMENTS ARE ADDRESSED AND APPROVED BY CONSTRUCTION COORDINATION

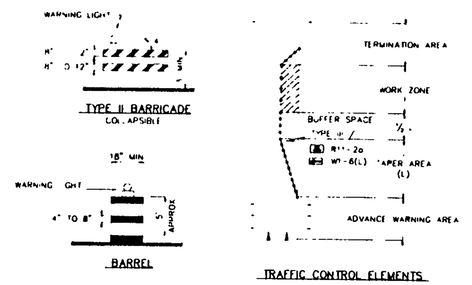
PROJECT CONSTRUCTION TRAFFIC CONTROL GENERAL NOTES



LEGEND

- WORK AREA
- BARRICADE – TYPE I, TYPE II, OR BARREL
- BARRICADE – TYPE III
- x VERTICAL PANEL
- WARNING SIGN
- D DISTANCE BETWEEN SIGNS – A DISTANCE MEASURED IN FEET EQUAL TO A VALUE OF TEN TIMES THE SPEED LIMIT OF THE STREET
- FLAGMAN POSITION
- S SPACING BETWEEN BARRICADES– A DISTANCE MEASURED IN FEET EQUAL TO THE SPEED LIMIT OF THE STREET
- L TAPER LENGTH – SEE CHART BELOW

THE TANGENT LENGTH IS EQUAL TO THE TAPER LENGTH FOR A GIVEN STREET.



TAPER REQUIREMENTS

SPEED LIMIT (MPH)	TAPER LENGTH (FEET) 10' LANE	11' LANE	12' LANE	MINIMUM NUMBER OF DEVICES FOR TAPER	MAXIMUM DEVICE SPACING IN FEET ALONG TAPER	AFTER TAPER
20	70	75	80	5	20	50
25	105	115	125	6	25	60
30	150	165	180	7	30	70
35	205	225	245	8	35	80
40	270	295	320	9	40	90
45	450	495	540	13	45	100
50	500	550	600	13	50	100
55	550	605	660	13	55	40

RECOMMENDED SIGN SPACING FOR ADVANCE WARNING SIGN SERIES

SPEED MILES PER HOUR	MINIMUM DISTANCE IN FEET BETWEEN SIGNS	FROM LAST SIGN TO TAPER
0-20	200	200
25-30	300	250
30-35	300	300
40-45	500	400
50-60	500-1600	500-1000

TAPER CRITERIA

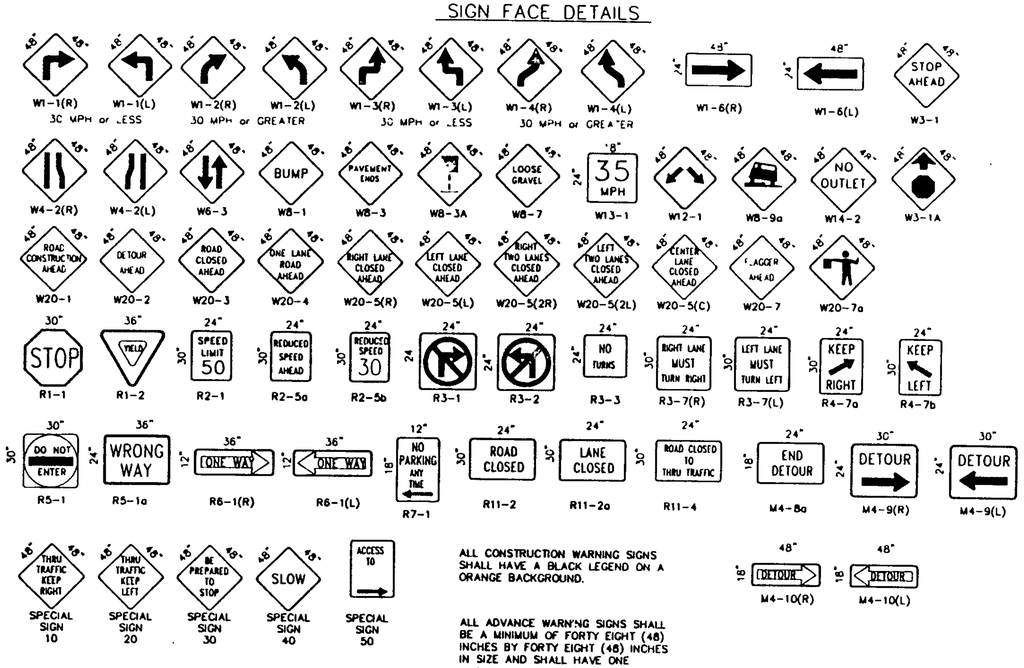
TYPE OF TAPER	TAPER LENGTH
UPSTREAM TAPER.	
MERGING TAPER	L MINIMUM
SHIFTING TAPER	1/2 L MINIMUM
SHOULDER TAPER	1/3 L MINIMUM
TWO-WAY TRAFFIC TAPER	100 FEET MAXIMUM
DOWNSTREAM TAPERS	100 FEET PER LANE

TAPER LENGTH COMPUTATION

SPEED LIMIT	
40 MPH OR LESS	$L = \frac{WS^2}{60}$
45 MPH OR GREATER	$L = W \times S$

L = TAPER LENGTH
W = WIDTH OF OFFSET IN FEET
S = POSTED SPEED OR OFF-PEAK 85-PERCENTILE SPEED IN MPH

SIGN FACE DETAILS



ALL CONSTRUCTION WARNING SIGNS SHALL HAVE A BLACK LEGEND ON A ORANGE BACKGROUND.

ALL ADVANCE WARNING SIGNS SHALL BE A MINIMUM OF FORTY EIGHT (48) INCHES BY FORTY EIGHT (48) INCHES IN SIZE AND SHALL HAVE ONE WARNING LIGHT.

AS BUILT INFORMATION — CONTRACTOR / DATE; WORK STAKED BY / DATE; INSPECTOR'S ACCEPTANCE BY / DATE; VERIFICATION BY / DATE; DRAWINGS CORRECTED BY / DATE; MICRO-FILM INFORMATION — RECORDED BY / DATE; NO

BENCH MARKS

SURVEY INFORMATION — FIELD NOTES: NO. / BY / DATE

ENGINEER'S SEAL

NO.	DATE	REMARKS	BY

REVISIONS

DESIGN — DESIGNED BY RICARDO ROYBAL P.E. DATE NOV. 1991; DRAWN BY CADD, - A.F.V. DATE NOV. 1991; CHECKED BY DATE

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING GROUP

TITLE: CONSTRUCTION TRAFFIC CONTROL

APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
DRC CHAIRMAN		9-28-92	WATER	N/A AWD	9/28/92
TRANSPORTATION		9-28-92	WASTE WATER		
HYDROLOGY		9-28-92			

PROJECT NO.	MAP NO.	SHEET	OF
4383.90	K-10	8	8

081093

'DT-14-87 CDATRAFT.DWG (1=1')

Unser Diversion LOMR
Albuquerque, New Mexico
Supporting Document #4